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The care of the human mind is the most noble branch of medicine.—GROTIUS.

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No. 1.

ESSAYS, CASES, AND SELECTIONS.

STATISTICS OF INSANITY.

WITHIN a term of ten years immediately preceding and following the year 1840, the greater number of our oldest and most important institutions for the insane were opened for patients. Some of these asylums have taken, and others are about to take, occasion, at the close of their second decennial periods, to give a retrospective view of the results obtained, and the progress made, during this time. So far as this has already been done, it has been duly chronicled in the notices of asylum-reports published in this journal, and forms an interesting record. The wise liberality of public authorities, the bounty of private citizens, the devotion of medical men, and the steady co-operation and support of the benevolent of every class, have accomplished a work which will not suffer by comparison with any thing of its kind in any country.

In 1840, barely 2,000 insane were under care, in twenty regularly organized institutions in the United States, and public attention had not been drawn to the large number of this class in the poor-houses and receptacles. In view of what even yet prevails in these places,

after all the efforts for reform that have been made, the imagination may be left to paint their condition at that time. At the opening of the year 1860, there were about 8,500 provided for in fifty institutions, most of which are of the first class. Besides these are a number of minor asylums, belonging to cities, counties, and sects, of which we have no regular report; and a steady though tardy progress is making in the provision for the chronic insane of new and thinly settled districts.

It is not to be wondered at that, under the constant demand for practical effort in behalf of the insane, no considerable advance should have been made in the study of insanity. Yet the want of success has not been mainly owing to a lack of interest, or even of activity, in this department. It seems to us in great part due to some fallacies in the method of inquiry, which was early adopted, and which has been suffered, with little change, to guide the scientific labors of the specialty. The time seems an appropriate one in which to thoroughly consider the general plan upon which our observations of mental disease are to proceed. What are our theories of the relation and comparative importance of the facts which are presented to us? Without such theories, little intelligent observation of mental or vital phenomena can be made. Can not these be reconciled, and their statement agreed upon, after sufficient discussion? Would not a less complicated and less pretentious plan than is now generally adopted, be more promising of good results? These and other questions which the subject will suggest, can not, we think, receive too thorough and general consideration. Our object here is merely to enforce the importance of such an inquiry. The matter can be usefully discussed at length only at a meeting of our Association, and we earnestly commend it to the notice of the members.

Looking over the annual reports of American Asylums, we need not say how almost entirely they are filled by numerical tables. The general fact is, that all the medical, social and economical particulars, belonging or supposed to belong to the history of each institution for the year, are thus arranged. With a certain license—as pardonable perhaps in the specialist as in the poet, who coerces to the de-

mands of measure or rhyme the noblest and most comprehensive words—these are called “statistics” of insanity. Nevertheless, it is not a little curious to trace the present all-embracing use of the term from its first introduction. This is due to a German professor, and dates not much more than a century ago. The forms of numerical tables had previously been resorted to for purposes similar to those for which they are now so generally used, and the idea of substituting “the figures of arithmetic for the figures of speech,” in many departments of knowledge, was necessarily involved in the philosophical reform which we are accustomed to date from the time of Lord Bacon; but statistics, as a system, were unknown previous to the middle of the last century. As the name imports, it was first applied only to matters of state concern. Population, wealth, commerce, education, etc., were reduced to numerical forms, which should prove the unerring guide of the political economist to future progress, and constitute for the past the most substantial foundation of history. But the new method soon became a system which was to comprehend all other branches of science whatever. The argument was, in the language of one of its journals, that “As all things on earth were given to man for his use, and all things in creation were so ordained as to contribute to his advantage and comfort, and as whatever affects man individually affects also man in a state of society, it follows that statistics enter more or less into every branch of science, and form that part of each which immediately connects it with human interests.”

The application of the system to the phenomena of mental disease, seems, however, to have been suggested by the introduction of the numerical method of Louis into general medicine. Shortly after this great medical philosopher had so confidently set about resolving the problems of pathology and therapeutics through his new method, Esquirol employed similar forms in his researches into insanity. These high expectations from statistics in general medicine were soon moderated, and their proper place in medical research gradually awarded. In pathology the system was found nearly useless. In therapeutics it has been of some utility, but almost wholly as a

critical weapon in affording negative proof. At present, only in epidemiology, and other branches of public hygiene which are practically concerned with masses of persons and general principles, is its applicability fully admitted.

The exact position of this system in the psychological medicine of the past, and its relations to the present stage of progress in that department, are less easy to determine. Esquirol gave a powerful impulse through his writings to the record of facts connected with insanity, and the extent and accuracy of his observations were the just grounds of his fame. But he carefully abstains from advancing any theory in connection with them, and does not even point out the comparative value of facts, or discriminate between them in any way. They are arranged in their merest accidental relations, and thus presented with the least possible regard to their meaning or use. This was, of course, all that could be expected from one whose chief mission it was "to overcome prejudices, to dissipate errors, . . . and to make known truths of useful practical application" in the treatment of the insane. But his example, so far as a practical psychology is concerned, has been perhaps too closely followed by the larger number of those who have succeeded him.

It has not been sufficiently considered, we think, that the subject of insanity has two widely different aspects, whence it is to be studied from separate, and in some respects opposite, points of view. These are the medical, and the social or political. The practical and administrative parts of these two divisions can not, and need not, always be separated, but their scientific relations are entirely dissimilar, and, we are convinced, can only be studied apart from each other, with any prospect of success. This will be evident from a brief view of the subject of statistical records respecting the insane. We have already referred to the origin of statistical science, and need only allude to the rank which it has attained in the forms of abstract as well as of applied knowledge. It has survived the attacks of ridicule and abuse, until it has come to be acknowledged as the only safe basis of social and governmental reform, of commercial enterprise, and indeed of all the grandest schemes of human progress. Books

of statistics, instead of being what Lamb once wittily, and with something of truth, termed them, "books that are not books," are now much more truly those from which, or because of which, books are made. But statistical science is not, as seems too often supposed, a mere record of heterogeneous facts. This were indeed "learning made easy," to the meanest intellect. The facts of statistics must, in the first place, be such as are capable of being reduced to numerical expressions, with a degree of exactness. These, of course, are only of the most general and collective classes. In proportion as facts become less general is their statistical value reduced, until we reach the individual and special classes, which are worthless. Again, facts should be collected and arranged with a knowledge of the purposes to which they are to be applied. A consideration with which idle collectors of empty facts often flatter themselves is, that the statistic must not deal with application or speculation, which would unfit him for observing properly. True, it is not the part of the statistic to combine or to apply facts, but it does belong to him to point out how they may be combined, and what principle must govern their application. The neglect of this has done much to bring the method into disrepute, and to give rise to the saying, that "anything may be proved by statistics."

Let us now look at the forms of statistics usually adopted in the specialty of psychological medicine. And, as at once the most convenient and the most perfect collection of the kind recently made, we will first take the abstract of "Statistics of the establishments for the Insane in France, from 1842 to 1853 inclusive," published in this journal for April 1860 and 1861. A highly centralized administration, having for its head in each department the first scientific men of a country, must ensure the great advantages of a thorough system of records, and the selection of competent observers. Now the number of institutions for the insane of a country, their capacity, their mode of support, increase, distribution, population, with their admissions and discharges at a certain time, and at regular periods, are seen at once to be capable of exact numerical expression, and when compared with such other facts as the whole number

of insane, and the total population, afford the most perfect guide to the legislator and the political economist. This is one kind of the facts given, and is truly a matter of state or collective concern. Another class has an indirect importance of the same character. These are such as the nativity and residence of the patients, the numbers recovered and not recovered, the number of re-attacks, and the number of deaths. They do not, like the others, point to necessary conclusions, but they afford ground for more or less probable inferences, which may be tested by other series of facts, and these by others still, according to the degree of complexity in each case. In the nativity of patients, for instance, there can be no direct practical interest. The spot of earth upon which an individual was born, can have no more relation to a state of mental disorder in his case, than the shape which the clouds will assume on the day of his death. The fact of race, which might be implied, could have little greater pertinency. Yet by comparing the number of insane of a foreign with those of native birth, and comparing the total native population with the whole number of immigrants, and in a similar way guarding against several obvious sources of fallacy, an inference might perhaps be derived, in the most general terms, as to the health and vigor of the entire foreign element from which the number of insane were derived. Still, it is plain that our statistics would be only an indirect and unimportant contribution toward such an estimate.

The third variety of facts contained in these statistics comprises all those concerning the vocation, degree of education, civil condition, residence, sex, age, season of attack, of recoveries and of deaths, vocation of recovered and of deceased, and other similar particulars. We have omitted to include the etiological records, which will be hereafter noticed. Now let us ask ourselves for what purpose these facts have been drawn out with such an ingenious minuteness. Their collocation cannot be based upon any principle of statistical science. They can be recorded numerically, but figures carry no virtue not contained in terms; and the common principle by which they are possibly connected must be expressed, before the first step in their combination is made. For it is to be remembered that no useful ob-

servation is possible, except as connected with some known or assumed principle which is present to the mind of the observer. Bald facts, without some hypothesis to co-ordinate them, are the merest rubbish. Even in physical science, where general laws are so accurately known, and deductive conclusions do so much to guide the student, still some hypothesis must attend upon the severest inductive processes in the discovery of special laws. How much more, then, do we need theory in organic science, whose most general laws are beyond our grasp. We have in meteorology a science whose foundation principles are capable of the most exact mathematical expression, but whose data are so extremely numerous and complicated as to render its progress by pure induction quite impossible. Who does not know the large use which is made of theory in the pursuit of this study? Yet in the study of mental phenomena, whose data are infinitely more complex, and whose primary laws are unknown, we are cautioned against anything beyond the merest record of facts.

If any proof were wanting of the extreme fallacy of the grouping of facts in connexion with insanity like those which we are now considering, it might be found in the comments which accompany these statistics. As though with tacit assent to their unmeaningness, their obvious meaning is coolly reversed or negative whenever—as is often the case—it is contrary to, or not confirmed by, the preconceived views of the writer. Thus instead of affording a test to theory, these facts are merely the excuse for offering endless hypotheses in their explanation. Let us take, for instance, the first table in the second part of the article referred to as given in our last number. This table shows that, during a given period, the yearly number of discharges from French asylums gradually diminished. Now the data given here we suppose to form a part of the true statistics of a country. Taken together with the facts that the admissions to asylums for the same period had increased nearly three hundred per cent., and that the number and capacity of these institutions had increased to a definite extent, we have a reliable basis for a few general statements of certain value. But M. Legoyt evidently fears that, as is the manner of psychologists, we must infer from these data a

decreased efficiency of treatment, and thence goes on to explain as follows :—

" We regret that the documents do not furnish the means of determining exactly whether this reported diminution belongs to the patients discharged before or after recovery. Still, we do not hesitate to admit the former hypothesis, and conclude that many were discharged before their complete recovery would warrant. For, on the one hand, it is not easy to believe, especially when we take into account the new therapeutic resources, and the increased comforts, which belong to nearly all modern asylums—that the treatment of the insane is less effective than formerly; and, on the other hand, it is probable that families, appreciating more fully from day to day the great advantages of these institutions, are more and more disposed to maintain their friends in Asylums, even after they may be acknowledged as incurable cases."

The table above referred to also shows what is termed "a very interesting fact," which is, that the percentage of discharges from asylums has been greater among males than among females. Instead of noticing this as a natural consequence of the larger yearly number of male admissions, the writer observes that "the explanations of this excess offered by directors of asylums have been various," and proceeds to enumerate some of them; but he himself questions "whether we ought not rather to attribute this difference to the greater or less severity of the disease itself, depending upon the difference in causes which induce insanity in the two sexes." Here is implied the error which has been before alluded to, of comparing things numerically which can have no numerical expression. The terms insanity, disease, and cause—when the latter is predicated of vital phenomena—are not entities which may be dealt with by numbers. But we shall have occasion to allude to this again. It is enough to say, there is no ground in reason or analogy for the primary assumption that sex has any necessary and positive relations to insanity. The presumption is, then, that it has none; and there is nothing in all the figures which have accumulated upon the point to weaken that presumption in the least. Yet the table giving the number of admissions according to sex, M. Legoyt says, " seems to settle the question" of the relative liability to mental disease. It

has been thus settled, as our readers are well aware, very many times, on one side and on the other. Will not some enterprising statistician at length draw up these opposite conclusions numerically, and strike a balance which shall be final—until the next report of asylum statistics is published? Yet it is satisfactory to see that, at points where we might expect some such absurd inference as the above, the writer is very happy in the common-sense explanations to which he limits himself, and which are, as he says, "wholly independent of psychological influences."

The fallacy, or rather the folly, of this array of heterogeneous facts in the name of the numerical method, may be further illustrated by the various tabulation of the ages of patients with the several particulars of admission, recovery, death, &c. This comparison is made because of the hypothesis that age has an influence in the development of insanity. Now what shadow of excuse is there for any such supposition? It is proper that we should be reminded here, that an empirical etiology has always gone before a scientific one, which has had only to render the former more exact and certain. Centuries ago the Father of Medicine remarked that phthisis was most commonly developed between the ages of thirteen and thirty-five years. The widest statistical records, made within the last century, have simply served to render this relation in more precise terms, and to refer to an imposing mass of figures as its proof. This may have been of some use in the construction of life-tables, although to medical men it can have only an infinitesimal value. But no physician, from the time of Hippocrates down, has observed that insanity belonged to any particular time of life more than another. And this is not to be wondered at, when the vaguely defined condition which we call insanity is contrasted with phthisical disease. Death and certain organic lesions are the test in one case. What it is in the other, who can yet tell us?

We may mention here a curious instance of the empirical suggestion of causes in insanity. Probably most of our readers have looked over the numerical inquiries once made into the supposed influence of the moon in causing mental disorder, and in varying its symp-

toms. The observation of numerous and intelligent persons upon this point for centuries was enough to prompt the most searching and methodical inquiry. The statistics, if we recollect aright, indicated some sort of connection between the moon's phases and morbid mental symptoms much more strongly than have those of the various accidents of age, sex, vocation, &c., with the same. But these coincidences were explained away, to the satisfaction of nearly all except the most ignorant and superstitious. This came, of course, in the progress of astronomy. In spite of statistics, and, indeed, of superficial observation to this day, the theory of lunar influence has ceased to receive attention. Have we not advanced far enough in meteorology, if not to create a disbelief in the effect of climatic changes upon insanity, at least to convince us of the utter hopelessness of further inquiry? Add to the immensely numerous and complicated data of this science the intangibilities of mind in its most perplexing manifestations, and do not our records which give the admissions, deaths, &c., according to season and month, appear fanciful to the last degree?

To other statistical heads of the same character as the above, we will only refer. The tables of civil condition, vocation and education are the principal ones not already noticed. It is safe to say that not one of them has contributed a useful suggestion in behalf of true science, and the appeals for popular effect based upon them, serve far more to bring discredit upon the specialty than for any good purpose. Most of these were observations begun in the ill informed zeal which attaches to all new methods, and it appears to us without foundation in rational knowledge. Be this as it may, they have been long tried, are entirely without promise of fruit, and may justly be abandoned or greatly modified for this cause.

In all but the first class, or that of true statistics, according to the division made at the beginning of this article, we have been dealing with proposed aids to the etiology of insanity, although the table of causes is usually only one of twenty special tables in our reports. It will not be necessary to dwell here upon the pre-eminent importance in a medical point of view, of the study of the

causes of mental disorder. We are forced to recognize that the morbid phenomena of mind, more than any other class of symptoms which we are called to notice, represent a most profound and radical type of disease. The most marked diatheses, as the scrofulous and nervous, representing the accumulated results of morbid causes perhaps through many generations, may still undergo one further transformation in the downward series,—into mental disease. There are, of course, numerous exceptions, in the temporary disturbance of the cerebral functions by toxic agents, or severe moral shocks, but, as compared with the number of cases in which insanity marks the farthest reach of vital degeneracy, they are but few. To the medical man, therefore, the chief problems of mental disease are of necessity those which refer to its prevention rather than to its cure; and hence the study of causes is of the first and almost exclusive importance.

But it must be admitted that the manner in which this class of investigations has been pursued, as appears in a large number of asylum-reports, and even of special treatises upon the subject, is the most unpromising, and even absurd, of any arising in the specialty. To say that the certainty with which one phenomenon brings another to succeed it is that which establishes causal relations between them, and not the intimacy of their relation in time or space, seems trite enough; but when we glance at the multitude of hypothetical causes which are stated in our etiological tables, it is sometimes difficult to say what we have better than was found in the days of the belief in astrology and demoniacal possession. If we are to avoid all theory in the observation of causes, and simply to record facts, must we not record all the facts, or how shall we discriminate? In the case of a patient who first exhibits what, in the judgment of the observer, is an insane manifestation during a thunder-storm, is the cause to be given as lightning, or thunder, or tempest, or flood? or, is it a moral cause, as anxiety or alarm? Accidents of this sort are constantly stated as causes, and such an instance as the above is by no means an extravagant one. If any of these circumstances are given, certainly none of them should be withheld. But why should

the record of any or all of them be the principal, or, as is sometimes the case, the sole, aim of the observer? In a particular case of insanity, we seek the expression of a cause for the sake, mainly, of prognosis; in general, we study etiology in order to find preventive means. It is needless to say that no one seriously supposes meteorological phenomena to contain the elements of a prevision of cerebral symptoms, any more than he does that planetary aspects control the virtues of medicinal herbs. Neither does he intend to urge the necessity of abating thunder-storms, or any of their incidents. We hope to be excused for seeming to trifle here, but we are at a loss how else to comment upon the grave burlesques of scientific forms which the subject calls before us.

Yet, unfruitful as the etiology of mental disease has hitherto been, and absurd as the tabular forms which have been applied to it, we believe that in the study of development—aided if necessary by tables whose figures may serve to condense simple facts bearing upon some sober hypothesis—is the main hope of progress in mental medicine. It would not probably be necessary, if it were in place, to defend such a belief here, as it has been impressed upon our readers in all the most recent and important works upon insanity. Nor shall we endeavor to give even the outline of a scheme of our own for the study of this all-important but most difficult subject. Certain it is, however, that no single line of inquiry is to be relied upon in so complex and intricate a matter. Our efforts must be moderate and patient. Accepting only the most positive facts, these must be grouped in every possible way, to present the many-sided aspects of cerebro-mental disease. An important step in this direction has lately been made by the celebrated French psychologist M. Morel, in his *Traité des Maladies Mentales*. This author entirely rejects symptoms as the basis of classification in mental disease, and designates the forms of insanity according to causes. Acknowledging the present imperfection of this scheme, he yet, and we think correctly, believes that by thus concentrating the attention of the physician upon the etiology of insanity, a most important point is gained. A brief analysis of his work, in the number of this journal for October, 1860,

gives a general idea of the proposed classification, and we hope that the views of M. Morel will gain the attention of every one interested in the progress of psychology. It will be seen at once, how much more condensed, simple and definite the matter of our tables of causes would become were this method of record adopted. The group "hereditary insanity" would take the first place, and, through its several classes, receive that especial attention which its great importance is acknowledged to demand. Next in order is "insanity the effect of toxic agents," in the widest sense. That all the numerous varieties of this large group must and do tend to develop a certain type of symptoms, will be admitted by the scientific observer. It would comprise narcotic, alcoholic, malarial, puerperal, mineral and food poisons. The third group, "insanity caused by the transformation of certain nervous disorders," would include a large portion of those cases now attributed in such an indefinite way to "ill health," and numerous other more or less remote sources. By thus bringing together in large groups the causes of insanity, it will be seen that the tendency is to direct attention mainly to predisposing or efficient causes, to the neglect of the infinite variety of accidental ones.

But we will not transcend our province by doing more than to point out the direction in which it seems possible some changes in our theory and forms of asylum-statistics might be advantageously made. If it be said that our hints are chiefly in limitation of the present methods, we remember that Drs. Bell and Ray, than whom there are no higher authorities in this or any country upon the subject, have wholly denied the value of the numerical method in insanity, and present only the general statistics of the institutions which have been under their charge. In fact, it is too often found in asylum reports that their professional value is inversely as the length and variety of the statistical tables presented. We do not, however, desire to see all numerical forms abandoned in the study of insanity. The "medicine of the future," in many of its departments likely to become almost wholly preventive, and thus of a public and general character, must owe more and more of its progress to statistical science. Let us by all means continue such records as have at present

any rational value, and let us adopt such other forms as the strict rules of scientific observation will warrant. We may remember that in whatever department rude knowledge has been already developed into science, figures have been without exception the agents of this change. It was by means of a numerical scheme—the atomic theory—that chemistry was raised at once to the rank of an exact science, and the most important applications to medicine and the arts became possible. Indeed, that exactness of any form of knowledge which gives to it the dignity of science exists just in the degree that numerical expression may be given to it. We have no right to deny the possibility that the beneficent aims of the physician may one day be firmly based upon scientific principles, nor to abate the most earnest efforts towards the accomplishment of so important a work.

THE MARVELLOUS.*

[*Winslow's Psychological Journal*, January, 1861.]

In the last number of the past series of this Journal we briefly reviewed the chief "phenomenal phases," as the Spiritualists say, under which the love of mankind for the marvellous has been displayed in past centuries. We purpose in the present article to consider the manifestations displayed in our own time; and it will not be amiss, in the first place, to recapitulate the actual claims of the Spiritualists, as stated by a prominent brother of the order, who is wishful to "present a brief general statement of the leading phenomenal phases in which, at the present day, Spiritualism is presented to us."

"Before doing so," writes this author (*Spiritual Magazine*, No. 2,) "as a preliminary observation necessary to a right understanding

* *Histoire du Merveilleux dans les Temps Modernes*. Par Louis Figuier. Paris, 1860.

The Spiritual Magazine. London, 1860.

The Arcana of Christianity, and various Sermons. By the Rev. T. L. Harris.

of the matter, we would remark, that there are persons in some way peculiarly constituted whose presence appears to furnish conditions requisite to enable spirits to act upon matter, or to manifest their agency in any way cognizable to men. In what this peculiarity consists, whether it be chemical, electrical, magnetic, odylie, or in some combination of these, or in what else, it would lead us too far from our present purpose to consider." (We break into the quotation at this point, in order to call attention to the effects of spiritual intercourse upon English composition.) "At present we would only point out the fact that the presence of one such person at least is necessary in every circle before any spirital manifestation can be obtained. Such persons are now technically designated *mediums*."

The most common form of the manifestations, and that which is most easily obtained, is seen in—

"1. *The Rappings, Table-tippings, and other Sounds and Movements of Ponderable Bodies.*—The company assembled place their hands lightly on a table, and if a suitable medium is present, in a short time sounds, like raps or detonations, are heard on the table, the chairs, the walls, or the floor, often varying in power and tone. . . . At other times, instead of sounds being heard, extraordinary movements of the table are seen, it rising and falling vertically or perpendicularly, and to different elevations of the floor, or sliding along the room first in one direction and then in another, or moving rapidly round it. . . . On more than one occasion we have seen the table rise from the floor without any contact. . . . no one being nearer than from two to three feet of it. Human beings also have frequently been raised off the floor and floated round the room in the presence of numerous persons.

"2. *Spirit Writings and Spirit Drawings.*—The former of these modes of communication is not unfrequent. Usually, the medium holds a pencil in hand as for writing, and, sometimes immediately, sometimes after a few minutes, the hand goes into involuntary motion, forming letters, words, and sentences, making an intelligible communication or reply to some question, verbal or mental, that has been asked. . . . With some mediums the hand is simply used mechanically, the medium not having the slightest idea of what is being written; with others this is accompanied by impression as to the immediate word or sentence that is to be written, but no further; I know one medium who sees before him in the air, or upon the table, the word he has to write. . . . Cases of direct spirit-writing, that is, not requiring the intervention of a mortal hand, are comparatively rare.

"3. *Trance and Trance Speaking.*—In this state the trancee frequently speaks as from a spirit—sometimes in long and sus-

tained discourse ; and even at times in a foreign and (to the trancees) unknown tongue. We have scores of times heard persons of but little education discourse, when in this state, with an amplitude of knowledge, which we are sure they did not in themselves possess, and with a logical coherence and power of expression of which in their normal state they were incapable. . . . This state is similar, if not identical, with that which in the same persons may be induced by mesmerism.

" 4. *Clairvoyance and Clairaudience*. . . .

" 5. *Luminous Phenomena* are sometimes seen at spiritual séances. They are usually described as very brilliant ; sometimes they appear as stars, or as balls of fire ; at other times they shoot, meteor-like, through the apartment, or gleam over the walls, or appear as luminous currents circling round a particular centre, such as the hand of the medium, the pencil with which he is writing, or some object in the room.

" 6. *Spiritual Impersonation*, or the representation or reproduction in a medium of the actions and manner, gait, deportment, and other peculiarities which distinguished the actuating spirit in his earth-life.

" 7. *Spirit-music*.—A musical instrument, say a harp or an accordion, being held or suspended in the hand of the medium, or of some person near him, tunes are sometimes played on it by invisible agency, often in a very superior manner ; sometimes it will be a known and familiar tune, at other times spirit-music will be thus improvised.

" We know persons who often, when alone and unexpectedly, hear delightful music, apparently in the air, resembling, and yet unlike, any other they have heard. . . .

" 8. *Visible and Tactual Manifestations*, such as the appearance and touch of spirit hands.

" 9. *Spirit Intercourse by means of the mirror, crystal, and vessel of water*. . . .

" 10. *Apparitions of the Departed*. . . .

" 11. *Visions and Pre-visions*.

" 12. *Dreams*.

" 13. *Presentiments*.

" 14. *Spirit Influx*, by which ideas and sentiments are infused into the mind.

" 15. *Involuntary Utterance*, . . .

" 16. *Possession*.—We believe that many persons treated as insane are only so in the same sense as the demoniacs of old."

These quotations afford a sufficient basis of information concerning the alleged facts of spiritualism to enable us to investigate its nature and causes, and we now proceed to consider the whole matter under

two heads—first, the physical phenomena of a *séance*; and, secondly, the results of spiritual dictation.

It has been conceded by the Spiritualists, over and over again, that the marvels of the *séance* are of the same nature with those wrought under the names of witchcraft, demoniac possession, mesmerism, &c.; and it follows that the facts and arguments bearing upon the latter will apply to the former also. With this preliminary statement, it is necessary first to take into account the element of fraud that enters into such pretended miracles.

In the accounts of *séances* that are held in private houses, we are usually assured that no fraud has taken place; and the character of the host is frequently adduced as a guarantee for the good faith of the performance. We must, however, take into account that all the tricks of a *séance* could be readily accomplished or surpassed by any of the intelligent gentlemen whose vocation it is to exhibit sleight of hand before the public; and hence, where deception is not only possible, but easy, we want some better security against its occurrence than can be furnished by the presumed integrity of the proprietors of drawing-rooms. *Quis custodiet ipsos custodes?* There have been some very great rogues whose honesty would have been thought above suspicion, until the day when their knavery was detected; there are many owners of ottomans and accordions whom it would not be difficult to dupe; and there are even some individuals not wholly lost to a sense of the pleasures of hoaxing. Upon all these grounds, it is fair to require that every display of spirit influence should bear the test of a close and critical examination—and that even the tables of an entertainer should not be exempted from suspicion and from search. In order to show some of the methods of deception that were practised during the prevalence of mesmerism, we proceed to condense a few pages from the work of M. Morin, entitled, *Du Magnetisme et des Sciences Occultes*.

"About twenty years ago (M. Morin states) the famous Robert Houdin exhibited a new trick, of his own invention, which he called *the second sight*. It was performed as follows:

"A lad of twelve, being placed at one end of the exhibiting sa-

loon, Houdin, crossing to the other side, requested the spectators to bring to him any objects they might have in their possession. He then questioned the lad about these objects; and received exact descriptions of them without any hesitation or mistake. The following may serve as a specimen of the dialogue. "What do I hold *with* my hand?" "A piece of money." "Of what value?" "Five francs." "Of whose reign?" "Louis Phillippe's." "Of what year?" "1831." "What do I hold *in* my hand?" "A box." "For what purpose?" "A snuff box." "Of what material?" "Gold." "What is there on the lid?" "A portrait"—and so on. The rivals of Houdin forced to study his trick, at length discovered and imitated it, until at all the fairs the acrobats joined this second sight to their tumbling, and sometimes, in order to add the attraction of mystery to their performances, pretended to mesmerise the person who described the objects. The secret was eventually published, under the name of *anti-magnetism*. It consists in this, that the manner of putting the question conveys the answer. For instance, they would ask, "What do I hold *with* my hand?" "What do I hold *in* my hand?" "What is it that I have *in* my hand?" "What is it that I hold?" &c. By varying the form of question it is easy to establish a conventional language; such that the first form shall signify a piece of money, the second a watch, the third a ring, and so on. As the spectators only presented things that they were accustomed to carry, a very large number of forms of question was not required; and little dictionaries were published, by which, and by the aid of memory, any two confederates could reproduce the trick of second sight. M. Gaudon, among others, in a *brochure* entitled *The Second Sight Unveiled*, explains in detail many ingenious stratagems; and pleasantly relates that he practised some of them in the presence of a party of mesmerists, declaring throughout that the performance was but a trick. The mesmerists, however, maintained that his confederate was a clairvoyant, and himself a magnetiser of the first order; and would not believe otherwise until they were shown the exact method of procedure.

"It is now well known that this second sight is but an exercise of

ingenuity which does not require any unusual powers, and, notwithstanding the *séances*, somnambulism is nothing else. Whenever the magnetizer knows what the somnambulist ought to do or to say, he is able to prompt him in a conventional language, expressed either by words apparently insignificant, or by a pressure of the hand, or some other method of touch, or even by his manner of walking, or of approaching a seat. You write on a morsel of paper something that you wish to have done by the somnambulist ; you give this paper to the magnetiser, who reads it, and who, without saying a word, places it in the hand of the subject. Presently what you have written is executed, and then the paper is shown to the applauding audience. It is but a trick. A touch of the hand has sufficed to indicate the part of the somnambulist. One magnetiser who became fashionable in Paris confessed to one of the most honorable members of the Philanthropico-magnetic Society, that he had 180 distinct methods of touching his subject ; and that these were all signs, previously agreed upon, by which to make the subject do those things which the audiences were most accustomed to require. Being reproached for his bad faith, he replied that the magnetic lucidity was so variable, as often to require the assistance of other means.

" Certain magnetisers have devised means of communicating with their subjects, without the aid either of words or of contact. We will cite two examples. A juggler who exhibited the trick of second sight, exhibited also the transmission of sensations. The pretended somnambulist held a glass of water ; and the performer announced that in drinking it she should experience the taste of any beverage selected by the audience. The name of the beverage required being written on paper, the operator, commanding perfect silence, placed himself behind his subject, and out of her sight, neither touching her, nor uttering a word, but making mesmeric passes with extended arms. While thus employed he panted violently, as if exerting an energetic effort of the will. The somnambulist drank ; and after a few seconds declared that she had tasted whatever liquid had been specified upon the paper. In this case the loud and varied breathing of the operator was the language which served to indicate the beverage that should be named.

"A friend introduced to me a subject said to be endowed with a most rare faculty. This individual having withdrawn, a card was taken at hazard from a pack, and presented to the operator, who, first looking at it, placed it face downwards upon a sheet of white paper, and made believe to mesmerise it. By this process, he said, it left upon the paper an impress visible to the somnambulist. The card being removed, the operator seated himself on a chair, silent, immovable, and even with closed eyes, so as to remove all possibility of collusion. Then, as previously arranged, the subject was brought into the room, and having examined and smelt the paper, he announced, first the color of the card, and then the card itself. The operator, after receiving our tribute of applause, informed us that the performance was a trick, requiring neither mesmerism nor clairvoyance. The position of his legs with regard to those of his chair, and of his arms and hands, formed a language sufficiently copious to designate all the cards, and enabled the pretended subject to see, at a single glance, which one had been taken from the pack.

"It may be safely concluded, therefore, that in all cases where the magnetiser knows what is required from the somnambulist, and remains in the room with him, the performance is open to suspicion. Such exhibitions prove nothing, inasmuch as it is impossible to exclude from them opportunities of deception.

"It is also necessary to regard with caution all performances of which the programme has been laid down beforehand, because such may be pre-arranged between the mesmeriser and the subject, who then has only to go through the steps of his part in their order. At one period of the *soirée* he will be insensible, next cataleptic, then ecstatic, and so on. In such cases, to require a variation of the programme will often break down the whole performance. For example, at a *séance* at Vauxhall, there were two brothers; one magnetiser, and the other subject. The former went through a succession of experiments in his own order, and prefaced each one by a statement of what was about to be done; but he was generally at a considerable distance from his subject—and out of his hearing—which seemed a sufficient security for good faith. At length he announced

that he would draw his brother to himself from one end of the stage to the other ; and the better to display the force of the magnetic attraction, he invited four strong men from the audience to form a barrier between himself and the subject, and to endeavor to arrest his passage. The four men took their places before the subject, whose eyes were bound, and who appeared to see nothing, although this had not been ascertained with proper care. The audience waited with impatience the signal for bringing the attractive force into play. At this moment I advanced with an air of mystery to the magnetiser, took him by the hand, and drew him away from the position in which he had placed himself, inviting him to exercise his attractive force from his new station. We were so placed that the subject could reach us, in a direct line, without coming into contact with the four men. The magnetiser was evidently opposed to my proposition, but having announced that he had power to attract his subject at pleasure, he could not refuse to try an experiment more easy than that which he had announced ; the distance being less, and there being no obstacles in the way. He set himself to magnetise with great energy, blowing like a porpoise, and probably expecting that the subject, hearing his breath, would be warned of his change of place ; but, unfortunately for him, the noise of the audience drowned that of his breathing. The subject, thinking all prepared, started as if nothing had been changed. Using his fists vigorously, he soon dispersed the four men, and continued his course in a direct line to the place where he expected to find the magnetiser—and then stopped, resting as one who had fulfilled his task, and not appearing to care the least in the world to seek for him who was said to be his centre of attraction. He had not felt, therefore, the force said to be directed towards him, and had yielded to an imaginary attraction ; or rather, there had been neither attraction nor magnetism in the case, but simply a concerted programme between two individuals, of such easy tricks that no juggler would venture to exhibit them, although the public regarded them with wonder when presented under the name of mesmerism. The experiment of attraction had been accepted and admired for many nights; and yet

one single precaution was sufficient to reduce it to its real value.

"In many exhibitions of clairvoyance, the eyes of the somnambulist are bandaged, and it is said that he can derive no aid from them. Those who have observed such exhibitions carefully, will not be slow to perceive the insufficiency of this precaution. If the somnambulist can name correctly and immediately the objects presented to him, it may be concluded that he can see them. But this is seldom the case. Usually he takes the object in his hands, feels it, and endeavors to form an idea of it by the aid of touch; then conveys it to his forehead and his nostrils—complains of fatigue, and requires the intervention of the magnetiser to give him a fresh dose of fluid. During these preliminaries, if the magnetiser himself can see the object in question, it is clear that the experiment must go for nothing, because by a word, a gesture, or by some of the contrivances described above, he has the means of conveying information to his subject. But suppose that, not attempting to conceal suspicion of the mesmeriser, such precautions are taken as to prevent him from either seeing the object or conveying information, then the somnambulist, by dint of grimaces and contortions, may displace the bandage, and by holding the object in a certain direction, as on his chest, may get such a glimpse of it that, in the case of a writing, he may decipher one or two words. This result, which many persons think wonderful, is altogether ridiculous.

"I was assured that a very famous somnambulist could read through many sheets of paper; and I made one trial of his powers. His eyes were not bandaged, and were not even completely closed. I gave him a book which chanced to be at hand, and which was probably unknown to him. He asked me through how many pages he should read, and I answered, "Twenty." He opened the book at hazard, and applied it to his forehead with many contortions, then took a pencil, and wrote a line upon the book, saying that it would be found twenty pages further on. The leaves were turned, and the line found, not after twenty pages, but after ten, at a place corresponding to that on which he had written. Was this clairvoyance? It is possible,—and yet it may be doubted: the somnambulist, in

placing the book upon his forehead, had an opportunity of glancing rapidly at a line somewhere, and in order to be certain that he had not read in the ordinary manner, he should have been prevented from touching the book.

"In order to give proof of clairvoyance, or of a power of seeing through opaque bodies, it would be easy to take precautions that would leave nothing to be desired. For example, instead of a bandage, use a metallic mask, or even free the somnambulist altogether from such fatiguing restraints, and interpose sheets of paper between himself and the object—or close his eyes with the fingers, and place the object above his eyebrows. But when it has been proposed to Mdlle. Pigeaire, and to other somnambulists vaunted for their clairvoyance, to submit to these precautions, they have uniformly refused to do so, and have only consented to perform under such conditions that trickery, being possible, was to be suspected.

"During a *séance*, there are very few people who can control themselves sufficiently to listen in silence. Most frequently, the audience will talk with the somnambulist, will rectify errors as they are committed, and will approve correct answers; all of them proceedings that must facilitate the task. Often the manner in which a question is put is sufficient to suggest the response. Finally, the audience are astonished by a performance to which these aids have been afforded; they forget the inaccuracies and mistakes, and remember only what has been rightly said, without reflecting that they have themselves supplied the little truth that they have heard. Any person whatever, not clairvoyant, but guessing—having errors constantly corrected, and having ingenuity to frame fresh answers, could not fail to be right sometimes; and could officiate at consultations precisely similar to the bulk of those that are held daily by the somnambulists.

"Whoever wishes to be certain that the responses, as they should do, emanate entirely from the somnambulist and are not suggested piecemeal, should carefully refrain from any remark or observation. But the somnambulists do not like the persons who proceed thus. They say that such audiences set them at defiance, freeze and take

away their powers. And they say truly ; for, as most of them are not at all clairvoyant, and only accomplish tricks of address by making people chatter, if the audience remain silent, the performers can no longer play their little parts."

This lengthy citation from M. Morin, while it can not be regarded as conclusive against the pretensions of all mesmerists, is sufficient to establish that fraudulent practices were the rule, rather than the exception, in the public exhibitions of their art. It will be in the recollection of our readers that Sir J. Forbes instituted a searching examination into the performances of every professing clairvoyant who came before the London public ; and that in every single case, without exception, he either detected and exposed trickery, or else produced complete failure by the employment of precautions that rendered trickery impossible. It is well known also, that a bank-note of large amount remained, for a considerable time, as a prize for any clairvoyant who could decipher its number through two or three thicknesses of paper : a feat much more easy than many of those which they professed to accomplish daily. We believe that no attempt was ever made to obtain the note in question—and, at all events, no such attempt was successful.

From these facts we infer that, as all the physical phenomena of so-called spiritual intercourse could be produced with great facility by simple mechanical contrivances, it is reasonable to suppose that they are so produced in the majority of instances. Mr. E. Delaware Lewis, in a recent number of *Once a Week*, describes a spiritualist séance at which he was present, and speaks of the contrivances by which the effects were produced as being too transparently fraudulent to impose upon any but the most credulous of mankind. That the desire to believe and to wonder does very seriously affect the faculties of observation and judgment in many cases, is a truth too familiar to be called in question ; and it has lately received a remarkable illustration in a paper called *Stranger than Fiction* ; the strangest thing about which was, that it found admission into a publication so respectable as the *Cornhill Magazine*. The writer, supposing him to write in good faith, has so jumbled together possi-

ble occurrences with opinions and with accounts of his own emotional state, that no judgment whatever can be based upon the resulting medley. Offering himself to the public as a narrator of events which he admits to be scarcely credible, he yet exhibits in every line of his composition the most absolute ignorance of the ordinary sources of self-deception. He relates, for instance, that Mr. Home, the medium, went *floating about in a darkened room*; and that the audience could "judge by his voice of the altitude and distance he had attained." It is humiliating to think that any one, in a position to be described as a personal friend by Mr. Thackeray, can have composed such rigmarole as this, or can be ignorant that a modulation of the voice, sufficient to produce erroneous impressions with regard to the altitude and distance of the speaker, is the easiest of all possible performances. On the face of the record there is not a tittle of evidence that Mr. Home floated about the room at all; and the facts appear to be that a dark outline, resembling that of a human figure, was seen to cross and recross between the spectators and the window, that something, stated to be a foot, touched somebody's chair, and that Mr. Home carried on a conversation, in the course of which the tones of his voice varied from time to time. The writer does not appear to have a suspicion that these events are a sorry foundation for the very splendid hypothesis that has been raised upon them.

It is curious, but in the *Spiritual Magazine* for June, 1860, there is an account of two evenings with Mr. Home; and the tricks recorded are in all essentials identical with those described in the *Cornhill Magazine*. The narrative given in the latter, however, is much more highly colored than that in the former; and a comparison between them leads irresistibly to one of two conclusions. Either Mr. Home's range of performance is limited, and the pursuits of his familiar spirits are remarkably monotonous, or else the two narratives refer to the same events. In the latter case, Mr. Thackeray's friend of twenty-five years' standing has drawn the long bow, for the edification of the general public, with a vigor and success altogether unapproached by the reporter for the special organ of the Spiritualists themselves.

Taking all the circumstances into account, we do not hesitate to express a very decided opinion that nine-tenths, or a larger proportion, of the physical manifestations of so-called spiritualism are neither more nor less than impudent frauds upon the credulity of the public; and we trust that some competent observer will undertake, with regard to them, researches analogous to those by which Sir John Forbes demolished the pretensions of the mesmerisers. We must fully admit the propriety of Professor Faraday's refusal to investigate such matters, based, as it was, upon the better occupation of his time; but there are many who might accomplish the task, as an amusement during leisure that would not, perhaps, be more usefully employed elsewhere. The mechanical and other contrivances in use are probably various, but there is little doubt that any one, possessing a moderate practical acquaintance with the applications of physical and mechanical science in the production of ordinary conjuring tricks, would very soon lay bare the more common methods of procedure; some of which, indeed, since this paper was written, have been graphically described and illustrated in the pages of *Once a Week*.

In the next place, we may remark that many of the statements made by the Spiritualists can not possibly be true. We will not discuss the physical impossibility of table-lifting without the employment of adequate force, so long since pointed out by Professor Faraday, but will select, by way of illustration, such a sentence as the following:—

"We have heard the rappings upon the floor, as if produced by a crutch: in this case, a lady present informed the circle that that was the mode in which the spirit of her grandfather signalled his presence to her. . . . All present saw exactly the spot whence the noise came, though no crutch or other means of making the sound was visible."—*Sp. Mag.*, No. 2.

Now it is very well known that the human senses are not so organized as to afford means of "seeing exactly the spot" whence a sound comes; nothing being more easy than to be deceived with regard to this very point. An exhibition of ventriloquism is a sufficient proof of this position; and a reference to the physiology of

hearing will of course place the proof upon a scientific basis. Mixed up with a description of the alleged *facts* of spiritual intercourse, we have, therefore, a statement that is necessarily untrue, because it involves an impossibility ; and it is difficult to avoid the supposition that a similar recklessness of assertion may characterize other parts of the same narrative.

Upon many points that would allow the application of tests, the language of spiritualists is too vague for refutation. For instance, they claim for trancees (*Sp. Mag.*, No. 2,) a power of speaking about things, and in languages, lying beyond the sphere of their natural knowledge ; and this claim is not sufficiently definite to be scrutinized. It is the most familiar of physiological facts that, in certain conditions of the nervous system, past sensory impressions, that need not have been understood, may be recalled ; and in this way sentences of unknown or of forgotten languages, or scraps from scientific lectures or treatises may be brought back to the memory, and uttered, under the influence of suggestions or associations that would be inoperative in the normal state of the system.* So far as this goes, we may admit the facts alleged by the spiritualists, and deny their conclusions ; somnambulism, either natural, hysterical, or artificial, being a sufficient explanation of such occurrences ; and the only condition necessary to the so-called miracle being that what is uttered should have been *heard* by the speaker at some former period. If the mediums claim more than this, they must assume one of two positions : either that the spirit communicating speaks with the precise amount of knowledge that it possessed whilst inhabiting an earthly body ; or else that the spiritual state involves an increase of knowledge with regard to physical science, and with regard to the

* The writer once attended a lady who, for two or three days, was delirious after childbirth. She had been born in France, had resided there during infancy and early childhood, and spoke the language fluently ; but was very slightly acquainted with French literature, and for several years had been away from French people, and from opportunities of French conversation. During her delirium, she sang French cradle songs continually, songs that she could not recall after her recovery. It is obvious that her memory was taken back to the sounds that she had heard in her nursery, and that she had long forgotten.

deeds done, and the languages spoken, upon the earth. Each of these hypotheses would admit of speedy and practical demonstration ; and either of them, if found correct, would lead to results eminently advantageous to mankind. If the former alone were true, we should be able to obtain from mediums a vast mass of information concerning past occurrences that are imperfectly recorded or understood. Scholars would rejoice in the restoration of works now known to us only by precious fragments. Historians would terminate forever their disputes about by-gone facts. The departed miser would reveal his hoarded store ; and the spirit of the victim would denounce the secret murderer, and point out the collateral evidences of his guilt. If the latter were true, the world would have realized, long before this, consequences which, but to think of, bewilders the imagination. Philosophers, painfully and laboriously seeking after truth, are surrounded in every department of inquiry, by a dim circle of hypotheses, standing between positive knowledge and the unknown. If, by communication with higher intelligences, they could be freed from the doubts that these hypotheses imply, the progress of the last fifty years, vast as it has been, would speedily sink into comparative insignificance. Bishop South, in his noble sermon upon the character of Adam, uses the known capacities of manhood to illustrate the unknown. "All those arts," he writes, "varieties and inventions, which vulgar minds gaze at, the ingenious pursue, and all admire, are but the reliques of an intellect defaced with sin and time. We admire it now, only as antiquaries do a piece of old coin, for the stamp it once bore, and not for those vanishing lineaments and disappearing draughts that remain upon it at present. And certainly that must needs have been very glorious, the decays of which are so admirable. He that is comely when old and decrepit, surely was very beautiful when he was young. An Aristotle was but the rubbish of an Adam, and Athens but the rudiments of Paradise." Surely we may pursue this magnificent parallel, and may learn from the vintage yielded by science in our time something of the possible scope of an intercourse that should realize what charlatans profess. We turn from such contemplation to the facts ; and we find that modern spiritualism, as

it is distinctively called, after six years' existence, has culminated in that brief elevation of Mr. Home, the very reality of which we have seen reason to call in question. Like its prototype of the time of Apollonius and of Simon, like mesmerism, divining rods, and table-turning, spiritualism has been absolutely barren of results. It has not added an iota to the sum of human knowledge, it has not settled a single doubt upon any subject. We judge it by its works—that great test applicable alike to doctrines and to men—and we find it entitled to a place with fifth-rate jugglery or gypsy fortune-telling.

The special forms of "physical manifestations" need not occupy much of our remaining space. Table movements, it is evident, may be produced either by unconscious muscular action during expectant attention, by the knee or foot of the medium or of an accomplice, or by machinery. The sources of the raps and other noises may be infinitely varied at the will of the performer. The appearance of spirit-hands has been greatly elucidated by the cartoons of *Punch*; and their feel by the following curious sentence—taken from the August number of the *Spiritual Magazine*—"the darker part of the room, and here arose a scene of indescribable confusion, but still producing feelings in no way unpleasant, though we knew not, *when we touched each other, who were spirits and who were fleshy human beings.*" !! It is, of course, possible that certain individuals may have spectral illusions—or subjective sensations as of hands ; and here again the influence of expectant attention affords a sufficient clue to the phenomena, if such occur. On the same principle, luminous appearances may be explained ; but these may be readily produced by most persons, in any dark room, without the intervention of a medium at all. They were made by Baron Reichenbach, the basis of a perfect avalanche of rubbish about a so called od-force ; a very complete examination of which may be found in the *Brit. and Foreign Med.-Chir. Review*, vol. viii. p. 378.

The terms od-force, odylic sphere, magnetism, magnetic fluid, electric fluid, &c., &c., form part of the machinery by which the spiritualists impose upon the credulity of the public. These terms are used as if they had definite and exact meanings, like water or milk ;

or as if the magnetic fluid or the electric fluid could be bought by bottlefuls of a druggist. The frequenters of the séance are probably not aware that the term "fluid," as applied by philosophers to electricity and magnetism, is nothing but a provisional name, and perhaps an unfortunate one, for agencies, the precise nature of which has not been discovered. There is no certain evidence of the existence of electricity as a distinct entity—as a fluid, and the word is only used as a convenient designation for the unknown cause of certain molecular changes in material bodies. Unfortunately, the public are not aware of this. The existence of the electric and magnetic telegraphs leads many an honest man to believe that if he knows nothing about their respective "fluids" himself, others understand them thoroughly; and he accepts the pseudo-scientific jargon of the day as containing the complete theory of spiritual existence. It cannot be declared too loudly that these words, impudently put forward as the representatives of knowledge, are in reality nothing but the scanty coverings of the most utter ignorance; and that as employed in the *Spiritual Magazine*, and similar publications, they are absolutely without any intelligible meaning whatever.

It is impossible to conclude this part of the subject without some reference to the men by whom the so-called spiritualism is upheld. Leaving hired mediums out of the question, the most prominent names in the *Spiritual Magazine* are those of Dr. Ashburner and William Howitt. Of these gentlemen, the former was unpleasantly conspicuous in connexion with the practice of mesmerism in a metropolitan hospital. Since then, mesmerism has fallen into desuetude by force of utter worthlessness, and its some-time champion appears as the apostle of a new delusion. Mr. Howitt is known to us only as having worked industriously for booksellers—a vocation more favorable to the memory and the invention than to the judgment. In their proper spheres, or even in any decorous and modest statement of their opinions, those persons are doubtless worthy of respect. But when Mr. Howitt epitomizes nearly the whole of the human race—namely, all who do not accept his hypotheses concerning spiritualism, under the fanciful appellations of Homo-Sus-Eruditis and Ho-

mo-Talpæus, and when both he and Dr. Ashburner raise their pigmy voices in railing against the gigantic intellect of Faraday, they put themselves beyond the courtesies of ordinary criticism. Our indignation at their failure in the respect due to the great philosopher of whom our age and country are so justly proud, must of course be largely tempered by a sense of the overpowering absurdity of the contrast that their assault suggests ; but upon such criminals, however contemptible, justice must be done. "What," says Pope, "must be the priest, where the monkey is a god?" What shall we think of a trickery that has Home and Harris for its oracles—Howitt and Ashburner for the guardians of its shrine ?

From the physical phenomena of spiritualism, we may now pass on to an examination of its literature, both descriptive and (professedly) dictated. The *Spiritual Magazine* is the most prominent example of the former, as the writings of Mr. Harris are of the latter.

The *Spiritual Magazine* need not detain us long, and only requires notice in order that we may point out a curious family likeness between the compositions of its various contributors. Through every diversity of style, through various degrees of knowledge, the imbecility of mind necessary to a belief in "spiritualism" makes itself apparent. From the fourth number we quote a portion of an article —italicising certain passages that are especially worthy of remark.

"The Rev. T. L. Harris, in his sermon of the morning of the 19th of February, 1860, said, as far as my memory serves me : ' Every flower, fruit, and tree emits into nature the best portion of its being —its essence. But who has seen the aromal essence of a flower? Who has beheld the essential form thus given off into the universe ?'

"This question caused me to remember a curious circumstance which occurred some months ago at the residence of two relatives, neither of them sharing those spiritual beliefs which I hold dearer than life. I will briefly relate the facts, for there are two. The first is as follows :—

"Another near relative and myself had visited my two lady relatives ; and after tea, in the evening, a beautiful night-stock was placed on the table underneath a gas-lamp with two burners, one of which only was lighted, with a green shade to throw the light down. As the fragrance of the flower diffused itself through the room, it was remarked by all of us, and I, not being familiar with the plant, was led to examine it more closely. And as I looked there seemed

to be a floating mist rising from the flowers of the plant, which I immediately mentioned to my relatives ; one of them, the one who accompanied me, and whose hand is used for spiritual communication, looked intently, and after a long time saw the ‘smoke,’ as we termed it, and then another of the party saw it—one of those who are incredulous on the subjects discussed in this magazine. But the fourth person did not see it.

“ I have long noticed, it is here necessary to remark, that when I put my two forefingers nearly together, a spark invariably passes from the extremity of the right forefinger to the corresponding extremity of the left. Nor have my own eyes alone seen this ; it has been seen by others, and *I have no doubt that under conditions, and if experiments be instituted on the point, this will be found common to all persons who, like myself, possess sanguine-nervous temperament.*”

The writer proceeds to relate that he approached his left forefinger to the stock, and that he immediately “ perceived and felt” a flash (electric or odylic) pass to him from the flower. He appears to mean, moreover, that this power of “ flashing” was continuous, and not exhausted by exercise ; for he says, “ The right forefinger produced similar flashes, but of less intensity,” and he then breaks out into the following rhapsody—

“ I regard this as a matter of science, *although* I do not for one moment doubt that spirit pervades all matter. The question for consideration is, What caused the flash *from* the flowers and leaves ? It could not be with force of my own, as I was unprepared for the result ; more probably—I throw it out only as an opinion—I had broken in upon the odylic sphere of the flower, which thus reacted upon the electro-odylic battery of my nervo-sanguine system. Cornelius Agrippa (whose three books on Occult Philosophy contain a mass of wonderful speculations upon nature, man, spirit, and God,) suggests the existence, *throughout his work*, of a subtle essence, sympathetic and antipathetic, between all things. *It is a matter for investigation ; and until a series of facts are eliminated by independent observers, must remain uncertain.*”

It is possible that these pages may fall into the hands of some readers who are unaccustomed to scientific phraseology, and unacquainted with scientific facts. Such a possibility, and such only, will justify a brief commentary upon what is intended to be conveyed by this twaddle about tea and relatives.

In the first place, the sentence from Mr. Harris, the text of the

whole affair, is absolute and unmitigated nonsense. If by *essence* be meant *perfume*—it is of course not true that every flower, fruit and tree emits it—because the vast majority are scentless. Neither is it true that this essence is anything invisible or recondite—as implied in the “Who has beheld?” &c.; for it consists—where it exists at all—of an essential oil, well known to chemists, and easily procurable in a separate form. If perfume be not intended, but something else, then that something must be either a definite chemical existence, such as oxygen—about which there is no mystery—or else a mere figment of Mr. Harris’s diseased imagination. Then what is the meaning of “emits into nature”? What is “nature”? Plants emit their volatile essences into the atmosphere, which is part of “nature” in one sense of the word, just as the plants themselves are parts of it; but Mr. Harris seems to imply that the plant stands outside “nature” and throws something into it. Again, “the best part of a plant.” What is the “best part” of a plant? and how does any one know that the part specified, whatever it may be, is, in any real sense, better than the rest? We apprehend that the only rational application of “best” to part of a plant, would be to the part most useful to man; and that this would be rational only in a very restricted sense—because the various parts are interdependent, and more or less necessary to each other. But such as our quotation are all the compositions of these would-be mystics, whether they call themselves Spiritualists or not. Words capable of being used in a dozen different senses, and sentences which, when analysed, are seen to be without any particular meaning, make up the sum of the literature of the marvellous—as created by believers.

It is mentioned in all elementary treatises on botany, that the anthers of certain plants are elastic; and in bursting, cast out the pollen, or fructifying dust, in little clouds or puffs. Such an arrangement is chiefly found in erect flowers, having a style higher than their stamens; and it provides for the conveyance of the pollen to the stigma. We have here a sufficient explanation of the “smoke” from the plant, if, indeed, this were any thing more than a subjective sensation; and the dry atmosphere of a gas-lighted chamber would

be very favorable to the occurrence of the phenomenon in question.

It is obvious that the flash said to have passed between the fingers of the observer, could not have been electric. An electric spark would not be visible against gas light ; and no such spark could be obtained in the manner described. An electric spark passes, whenever two bodies, differently charged with electricity, approach each other under favorable conditions. But, if it were possible for the right and left forefingers of an individual to be differently charged, the equilibrium would be restored through the unbroken continuity of the bodily tissues, and not by a spark passing through the atmosphere.

The other hypothesis suggested is, that the flash was "odylic." Now "odylic light" is a new name for a very old thing ; that is to say for sensations, like those produced by light, but dependent upon changes in the sensorium itself, and not upon impressions from actual light falling on the retina. The optic ganglia of the sensorium are so organized as to convey, in their normal state, no impressions but those of light. It follows that almost any change wrought in them, and there may be many such, conveys the idea of light to the mind. Pressure on the eye produces a luminous spectrum. Blows on the head are well known to have the same effect. Expectant attention—*i. e.* partial hypnotism, produces all sorts of luminous appearances, which, like those from blows or pressure, have no reality outside of the spectator. It is very likely, therefore, that the writer whom we quote may see "flashes" under a great many circumstances, all of them depending upon the state of his own nervous system : but, when he talks of other people seeing the same "flashes," he falls into the droll mistake of the Irishman, who, having had his head broken on a dark night, swore that he had recognized his assailant by the light that gleamed from his own eyes on receipt of the blow. It is of course possible that two independent flash seers may meet over the same pair of fingers, or the same flower-pot ; but the identity of their flashes, unless pre-arranged, could be disproved by the simple device by which Daniel overthrew the testimony of the elders.

The remaining paragraph that we have transcribed is so utterly without meaning, that it may be useful, perhaps, as a mnemonic exercise. It ought to have been presented to the public for this purpose ; as a dictation by the spirit of Foote, and as a continuation of the following :—

“ So she went into the garden to cut a cabbage-leaf to make an apple-pie, and while she was there, a great she-bear popped its head into the shop. What ! no soap—so he died ; and she very imprudently married the barber, and there were present the Joblilies, and the Garuylies, and the Piccalillies, and the great Panjandrum himself, with the little round button at top, and they all fell to playing the game of catch as catch can, till the gunpowder ran out at the heels of their boots.”

In papers of more pretension, in the *Spiritual Magazine*, we observe always the same confusion of thought, and the same obscurity of language. There is a Dr. Blank—professedly, and very possibly, M. D. Cantab.—who undertakes to record FACTS. He says, “ I boldly claim for the facts I have here recorded that their evidence has been carefully tested by me and my friend X. Y.” Now there is not the remotest indication of this testing in his descriptions ; and we infer that Dr. Blank, like the author of *Stranger than Fiction*, has still to learn that very rudimentary piece of knowledge, the meaning of the word “ fact.”

We turn next to Mr. Harris, regretting that the space at our disposal compels us to treat him with a brevity that will accord with his merits, rather than with his pretensions.

The latter are nothing less than Apostolic. Himself a progressed “ medium,” and having passed through the physical and intellectual, to the *spiritual plane* of mediumship, he now says that he possesses—and he only—the power of discriminating between good and evil spirits—*e. g.*, between the spirit of Paul the Apostle, and an evil spirit personating that of Paul. With the delicious vagueness of his kind, he thus describes the powers with which he has been endowed :—

“ Differenced, as to states, from the men of the present age, by means of an opening of the internal organs of respiration, which is continued into the external form, I inhale, with equal ease and free-

dom, the atmospheres of either of the three Heavens, and am enabled to be present, without the suspension of the natural degree of consciousness, with the Angelic Societies, whether of the ultimate, the spiritual or the celestial degree. It is impossible to inhale in this continued manner, from the celestial into the corporeal, without living among the angels. Inhaling the divine aura, by means of which respiration is continued, they exist in a waking reality of Divine Wonders. They enjoy, objectively, the vision of the Lord as a sun, illuminating, with the light of infinite truth, the expanses of the firmament. He manifests Himself in a verbal revelation through the word, which exists in every Heavenly Society. He is also made known to them in a direct appearance, and is transfigured before them in His Divine Human Form. Besides this, He speaks to them by an inmost voice which is audible in the sanctuaries of the breast. All of that tender intimacy which existed, in natural representatives, between our Lord and His disciples, during the period of His incarnation, is realized in His presence with the Angels. Having been finally intromitted into these three degrees of interior respiration, I was led upward, through the series of experiences of which the narration now ensues, that, by a pathway of easy and instructive transitions, I might approach the state of qualification to understand the arcana contained within the Celestial Sense of the Divine Word. At the close of these initiations, as will be found in the context, it was my privilege to behold the Lord, whom I saw in His Divine Appearing, and who laid upon me the charge of receiving and unfolding such of those arcana of the celestial sense as are contained within this volume, and as will in due time be given to mankind in continuance of the labor which is here begun."*

Into the discussion of such claims as these, we can not, of course, enter, but must content ourselves with looking at Mr. Harris's writings by the light of internal evidence alone. We are told by Mr. Howitt that the progressive nature of Mr. Harris's inspiration, and his constantly increasing enlightenment, produce changes in his views from time to time; and hence that we must not, in judging of his works, take occasional contradictions into account. Thus he has "of late broached the old doctrine of the perdition of certain souls; whereas, in 1855, he was a staunch Universalist." We have more to say about Mr. Harris than the pages at our disposal can receive, and therefore we will leave the question of contradiction as we find it.

The "gifts to mankind" consist, at present, as far as we know,

* *Arcana of Christianity*, Part I. vol. i. p. 7.

of poems, sermons, and the "Arcana of Christianity." These must be briefly noticed in their order.

The poems are of various kinds—sacred and profane. The following is the first verse of a hymn "given" by a spirit; and it is followed by three or four more of the same quality. The leading idea is one that no ballad-monger can degrade; but it was revealed to mankind before Mr. Harris's time, and we have only to do with Mr. Harris's treatment of it :—

"Oft when *storms of pain are rolling,*
And I cross *the fiery sea,*
Comes a voice, my heart consoling,
Jesus loves me,—even me."

With great submission to better judges, we think that the words italicised must have been a "gift" from the spirit of Mr. Robert Montgomery.

The next is a parody on "I dreamt that I dwelt in marble halls." Like the former, it is not original in conception, although strikingly so in treatment :—

"I dreamt that I dwelt in fiery halls,
With a serpent by my side;
She wound me in her venomed coils,
I had a demon bride.
She spoke with lips like snakes that stung,
And breath of *poisoned* flame,
You ruined me when my heart was young,
But I love you all the same.

My heart is now an adder's lair,
My body turned to mould.
I sit alone in dark despair,
Within the devil's fold.
For you I drank the cup of doom,
The harlot's sinful shame.
Come, clasp me in our fiery tomb,
For I love you all the same.

We drank of passion's cup, alas!
And reap what we have sown;
And see in hell's huge looking-glass,
What beauties we have grown.
You are the corpse of manhood now,

In spite of all your fame;
But, foul deceiver, hear my vow,
I love you all the same.

I'll make your heart my *dressing-gown*,
And on it I will sit;
And, *like a rat*, your soul I'll drown
In hell's unfathomed pit.
Take back, take back, those fires of lust,
In wreaths of snaky flame,
I spit on thee, thou devil's dust,
But I love you all the same."

We offer these stanzas as a sufficient illustration of the surpassing beauty of "spirit-poetry." They are indebted to the "giver" for nothing but their precise verbiage—the rhythm being a parody, the idea that man's sin shall find him out, not being new, and the particular application of this idea being expressed, in every detail, by Swedenborg. If any reader wishes to institute a comparison between a "spirit" poem and a "fleshy" one, on the same subject, we recommend Campbell's ballad of the "Spectre Boat," as an illustration of the manner in which similar materials have been handled by an author of taste and genius.

The sermons are somewhat out of our direct line of criticism. They are what many people would call "fine compositions;" and are overloaded with tumid verbosity, and disfigured by such coinages as "*Familism*" and "*Outmostly*," until the actual meaning of the sentences can scarcely be discovered. When found, it is often like the "*Emission of Essences*" notion that we have already quoted; but, in general, the leading idea seems to be an approaching union of Christians of all denominations on a higher level of faith and duty than that of any single sect; and the means thereto, a general disregard of doctrinal distinctions. We do not ourselves feel that sound doctrine is a thing to be laid aside like an old garment; and we fail to see any evidences that these sermons are not the result of preparation and thought like the sermons of any other man. They are professedly "mediatorial," which means, in the slang of the spiritualists, that Mr. Harris is but the instrument of their delivery, and that he has no share in their production.

The "Arcana of Christianity" might have, as its second title, "The Spiritual Gulliver." Purporting to be a commentary on the first chapter of Genesis, it contains an account of Mr. Harris's visits to the Heavens, the Hells, and the planetary bodies—including some of the latter not known to astronomers. It contains, moreover, a particular history of the youth, education, decline, and fall, of the great enemy of souls—upon a planet now destroyed by reason of his crimes, and those of his followers. We can not enter into any detailed examination of the volume, but must be content with stating general conclusions. Apart from any question of probability, we think the book is not to be received as truth, and for the following reasons :—

In the first place, there is an absence of that verisimilitude, arising from minute touches of description, by means of which the grace of fiction—

"Has power
To render things impossible believed;
And win them, with the credence of an hour,
To be for truths received."

We are told that the inhabitants of the moon are little people, like children of twelve years old, and "breathing from the abdomen;" that the men of Jupiter are of a sky-blue color, dotted over with gold spangles, and so on; but we never stumble upon a sentence that conveys, by some little word, or turn of thought, the idea of a recital of actual experience. Safe generalities, sufficiently like the generalities of this world to remind us that imagination may alter, but can not create, make up the bulk of the narrative. We find nothing quite unlike our present surroundings. We do not find any clue to the manner in which life is maintained upon those planets that are placed under physical conditions widely different, probably, from those of the earth; and we suspect that Mr. Harris, on his "natural plane," is not aware of the difficulties of this kind that are perceived by philosophers. However this may be, he contributes nothing to their removal; and the want of the details which such a spiritual traveler ought to relate, leads us to conceive that his book, as far as there can be a more or less in the matter, is less true than Gulliver's travels.

In support of this opinion, there is, moreover, something like positive evidence, if it be searched for. We must be content with a single illustration :

Swedenborg, whom, in all essential matters, Harris professes to confirm, describes the "angelic language" as surpassing the power of man to conceive, and as resulting from a direct relationship between sounds and ideas. Harris, describing an angel originally from the planet Saturn, writes, "He spoke in a language which seemed composed of liquid sounds, divested of all harshness." And yet we read, in the same volume : "There is a planet beyond the orbit of Neptunus, as it is externally styled, *which is called Polyhymnia by the ANGELS*. If it were Πολύμνια, or even Polymnia : but Polyhymnia ! and by the angels ! It would not, perhaps, be inconceivable that an angel should speak Greek to Mr. Harris ; but anglicized Greek is too much of a good thing ; and the words quoted certainly imply that the planet is called Polyhymnia among themselves. We read also of another planet, "between the sun and Mercury, *called Corona* ;" and why one planet should have a name that is half Greek, and another, one that is entirely Latin, we must confess ourselves wholly at a loss to understand.

There is another objection to Mr. Harris's writings, one that it is painful to urge, and yet not possible to ignore. The *Arcana of Christianity* abounds with passages concerning sexual love, earthly, planetary, angelic, and demoniac, until, indeed, directly and indirectly, the relations between the sexes furnish the most prominent subjects in the volume. Some of the passages are only voluptuous ; others absolutely filthy. In Polyhymnia "the yieldings of the bride are in obedience to the descent of a direct influx from the Lord Himself ; but more than this I am not permitted to narrate. The bliss of nuptials is prolonged to the close of life, when it gently merges into immortality. The wife is as fond at ninety, about which period translation generally takes place, as in the sabbatic rapture of the bridal dawn. They have no name for coldness, because it is never experienced, nor are the wives ever satisfied but to rest in their husband's embraces, &c., &c." In this world "those unfortunate crea-

tures who prostitute their bodies for gain, are attended by demons, who live, *as to their subtle organic parts, so far as they are magnetically extended into the subtle realms of nature, by absorbing into their bodies the degraded substance which otherwise might become inwrought into the corporeal tenements of little children.* Hence it is that after a period they (qy. the demons) are able to become mothers no more." We can not give any other examples of this balderdash; but all practical physicians will agree that such an excessive prominence of erotic ideas throws great light upon the condition of the author of the work; and forcibly suggests the means by which that condition has been produced.

It is curious, moreover, that similar thoughts and feelings were commonly manifested by those persons who, in the sixteenth and seventeenth centuries, abandoned themselves to the delusions of pretended witchcraft and sorcery. The explanation may be, however, that the great majority of these unfortunates were crazy; and therefore, as sexually excited lunatics are always a numerous class, and as demonomania was, at that time, the prevailing type of insanity,—so the frequent combination of the particular depravity with the particular hallucination may be ascribed, perhaps, to necessary coincidence alone. Whatever the explanation, there can be no doubt about the facts; for the accusations against the supposed witches and sorcerers always imputed, and their confessions under torture always admitted, actions prompted by morbid sexual desire. For instance, the following passage is cited by M. Figuier from the official abstract of the confessions of persons condemned for sorcery and witchcraft, in 1609, by MM. Espagnet and Delancré, commissioners appointed by Henri IV. to investigate and punish an outbreak of demonomania in the neighborhood of Bayonne. The original is given in the French language; but, from considerations which Mr. Harris ignores, we have thought it best to present it to our readers in Latin.

"*Modum reperierunt quo uxores amplexibus maritorum abripiant; et, sancto sacroque vinculo conjugii violato, mœchantur et fruuntur coram ipsis maritis, qui, velut statuae immobiles, sui honoris damnum conspexerunt sine potestate ut tanto sceleri obstent. Ipsa conjux,*

muta, coactâ silentiâ superata, frustra auxilium mariti implorat :—maritus, fascinatus, impotensque, oculis apertis, decussatisque brachiis, suum dedecus aspicere compellitur.

“ Saltare inverecundissime, epulari feedissime, cum demoniis copulare, blasphemare turpissime, ulcisci insidiose, omnibus libidinibus horrificis subsequi, paedicare flagitiosissime, busones et viperas de voluptate animi alere, omnigena rara aconita habere, caprumque graveolentem amare et amplecti, feruntur.”

The conclusions that force themselves upon us, after this hasty review of the physical and literary phenomena of spiritualism—may be summed up very briefly. We think that these phenomena are the results of three elements, hypnotism, fraud and delusion ; and that these have all been present in almost every *séance* of which we have seen any record. It is clear from internal evidence that the works professedly dictated by spirits contain nothing that might not emanate from the brain of the medium ; and that their lofty pretensions can not for a moment be sustained in the face of criticism. We do not feel called upon to attempt to separate mere folly from actual fraud, or to indicate on which side of the boundary line our personal convictions would induce us to place this or that prominent believer. We say farewell to the so-called Spiritualists as a whole ; wishing the rogues more honesty, and the dupes more sense.

ON PUERPERAL INSANITY. By J. H. WORTHINGTON, M. D.

“ It would be difficult to find,” says a writer in a recent medical journal, “ in the whole range of mental pathology, a subject more worthy of interest than Puerperal Insanity. The circumstances of anxiety and distress under which it frequently originates, the lives, or at least the reason, of two human beings simultaneously placed in jeopardy, the serious difficulties attending its treatment, the medico-legal questions, often so embarrassing, to which it may give rise,

and the evident though complicated relations between the cerebral functions and those of the uterus, commend it equally to the consideration of the jurist, the investigations of the alienist, and the attentive study of the physician." Yet if we examine the literature of the subject, we shall find a remarkable dearth of authorities to which we may turn for information. The treatises on insanity, with few exceptions, among which the work of Esquirol is the principal, treat the subject very briefly, and the writers on obstetrics are not more satisfactory. The late Dr. Macdonald of New York, and Dr. Gundry of Dayton, Ohio, in this country, and Dr. Marcé in France, have published in the medical journals, and the latter in a treatise especially devoted to the subject, the results of their investigations in this field of medical research. To their labors I am indebted for most of the facts which are presented in this paper.

It may be proper to premise that the term "puerperal" does not signify any thing essentially distinct, either in the character of the cerebral symptoms, or in the type of the mental disorder, but simply that the physical derangements attendant upon pregnancy, child-bearing and nursing, are the principal cause of the insanity which would be equally produced by any other physical suffering or constitutional disturbance of the same intensity. Neither does it imply that the disordered action of the brain, to which the mental derangement in puerperal insanity is immediately owing, is strictly sympathetic with, and dependent upon, the various physical disorders which accompany childbearing; because if this were so the insanity would necessarily cease on the termination of these disorders, which is far from being always the case. Nor is it intended to convey the idea that the physical disturbance and suffering which attend upon the puerperal state, are the exclusive causes of the insanity which follows. There are doubtless cases in which the patients would pass safely through the perils of childbearing, could they be protected from the influence of various circumstances of an injurious character. All the moral causes which are capable of producing insanity in the non-puerperal state now act with two-fold power, and occurrences calculated to affect deeply the emotional sensibility, are fre-

quently combined with the physical causes incident to childbearing in producing an attack of insanity. The injurious effects of painful emotions were so well known in ancient Rome, that it was the custom to suspend a crown from the doors of houses where women were in labor, to indicate that such houses were to be held sacred from all intrusion; and Van Swieten informs us, that in the city of Haarlem, such houses were also designated for a similar purpose.

There are no records which show satisfactorily the proportion of women who become insane, to the whole number confined. In the Westminster and Queen Charlotte's, two large lying-in hospitals of London, of 5,500 women confined, only 20 were attacked with the disease during their residence in these institutions, and in others of the same kind the proportion has been still smaller. These facts do not, however, show the whole number attacked, as the time spent in lying-in hospitals after delivery is usually very short, and does not include the period of lactation, which furnishes a considerable proportion. Making, however, every allowance for these cases, the statistics above cited are sufficient to show that only a very small proportion of all the women confined are affected with insanity. The proportion appears much greater when it is estimated upon the whole number of insane women admitted into public institutions. Dr. Gundry has collected from various sources the statistics bearing upon this point, based upon 16,109 cases, of which 1,434 were connected with the puerperal state, a proportion of nearly 9 per cent. The puerperal state is generally considered as commencing with pregnancy, and continuing until the time of weaning or a little later, and is divided by most writers into three periods,—the first being confined to utero-gestation, the second extending from delivery to the end of the second month, at which time the uterus has returned to its normal condition, and in women who do not nurse the menstruation is established, and the third comprising the period of lactation, extending from the end of the second period to the point of time after weaning when the first menstruation is accomplished. Owing to the various causes of constitutional disturbance to which the female is exposed, and the condition of nervous irritability which ex-

ists in consequence of the physiological changes going on in her system, she is liable to be attacked with insanity during the entire duration of the puerperal state. I propose to give an account of the disease as it occurs during each of these periods.

1. The changes which the mental condition of pregnant women undergoes are well known to all practitioners of obstetrics, and it would be occupying the time of the reader to little advantage, to enumerate all the caprices and dislikes, all the desires and aversions, all the feelings of despondency and depression manifested by women during the period of utero-gestation, and the various physical disturbances such as cramps, vertigo, fainting, nausea, vomiting, etc., to which they are liable. Some of the cases recorded, however, show, in a very forcible manner, the intimate sympathies existing between the pregnant uterus and the brain, and may be briefly noticed. Dr. Marcé mentions the case of a woman who became hydrophobic during the first four months of each of her eleven pregnancies. The dread of water began to be manifested soon after conception, and at length became so urgent that she could neither drink herself, nor bear any one else to drink in her hearing, and to cross a stream of running water was nearly impossible to her. M. Caseux relates the case of a young lady, who, during her first pregnancy, felt an uncontrollable dislike to her husband, to whom she was tenderly attached before; and of another, who conceived such an aversion to her own home that, in spite of the efforts of her reason to the contrary, she was compelled to go to the country to be confined.

Cases of this description are sufficient to show the powerful influence which the gravid uterus is capable of exerting upon the mental condition of females, even of well balanced minds. In persons of feeble intellect, or of naturally excitable temperament, or where a predisposition to insanity may be supposed to exist, it could scarcely be otherwise than that this adverse influence would be more sensibly felt, and that what was in one case only unevenness of spirits, or irritability of temper, should in the other amount to decided intellectual disorder. The liability to insanity during pregnancy is much less than during the period immediately following delivery. Of 783

cases of puerperal insanity reported by Macdonald, Marcé, Gundry, and others, only 65 cases occurred during the first period, or that of utero-gestation. The form most commonly observed is that of melancholia, and the causes of the malady, besides hereditary influence, are a depressed condition of the physical forces, and painful moral emotions. Esquirol and other writers mention cases of insanity commencing with pregnancy, and terminating only with delivery. Montgomery has seen the case of a woman who became insane at the outset of three successive pregnancies, and another in which the disease was developed during eight pregnancies, and subsided after delivery. A remarkable feature of the insanity of pregnant women is the almost utter absence of suffering during labor, and another, which has been noticed in cases of high maniacal excitement during the last months of pregnancy, is the exemption from accidents to which both mother and child might be supposed to be specially liable, in consequence of the violent movements of the former. In cases where the disease can be clearly traced to the uterus, recovery may be confidently expected at the termination of pregnancy, but where it has been caused by some violent shock to the nervous system, or some prolonged affliction, and originates during pregnancy, the prognosis may be unfavorable. History relates the case of Jeanne la Folle, Queen of Portugal, who, becoming insane at the death of her husband, soon after conception, was in due time delivered of a daughter, but nevertheless continued insane.

The cases of temporary insanity occurring at the moment of delivery, in consequence of the violent physical suffering accompanying the last stages of labor, are not very numerous, yet may be considered as of sufficient interest to receive a passing notice. All obstetrical writers have described the agitation and anxiety which generally supervene during the passage of the head of the child through the uterine neck, and in some cases an attack of mania has been known to be caused by the acute physical distress and suffering, through which the patient passes at this stage of the labor. Dr. Marcé observes, "that cases of this kind are not very frequent, and some physicians of great experience have never witnessed them, yet the

practitioner ought to be aware of the liability to such attacks, so alarming in their approach, and so important in a medico-legal point of view." Dr. Montgomery, in the *Dublin Journal of Medical Science*, has related a number of cases of mental derangement originating under these circumstances, and Dr. Marcé, among others of the same kind, mentions, on the authority of Osiander, the case of a woman in labor with twins, whom the efforts of two strong men could scarcely restrain from throwing herself out of the window, and of another who, in the midst of her pains, begged with loud cries that her abdomen might be opened, and actually procured a knife with which to accomplish that purpose. A third case, which appears almost incredible, is related on the same authority, of a negress, who, being attacked with insanity during a long and painful labor, opened her own abdomen, extracted the child, and afterwards recovered. Notwithstanding the severity of these attacks, they are seldom followed by evil consequences, except such as may result from the violence of the female against herself or her offspring. The following case of a young woman, related by Esquirol, is suggestive of the considerations, in a medico-legal point of view, to which such cases may give rise. This young girl made no secret of her pregnancy, and had made all the needful preparations for her confinement, on the eve of which she was seen by her friends as usual. She was delivered during the night, and the next day the body of the child was found in the cesspool, mutilated with blows from a pair of shears. She confessed the act without manifesting the least regret on account of it, and appeared entirely unconscious of having done anything wrong.

2. The period immediately following delivery, and extending to the end of the second month, about which time, in women who do not nurse, the menstrual function is resumed, furnishes the greatest amount of insanity. Of 783 cases collected from various sources by Dr. Gundry, 453 occurred during this period. The causes of puerperal insanity occurring during the second period are such as either belong to the constitution and physical condition of the female, or such as act upon her system from without, and may properly be called occasional or accidental.

Various passages in the writings of Hippocrates show very clearly that he was familiar with puerperal mania, and there is, perhaps, nothing which shows more strikingly the influence exercised by the Father of Medicine over the opinions of succeeding generations, than the fact that his ideas respecting the causes of this affection have prevailed almost uninteruptedly to the present time. It was remarked by Hippocrates, that when the lochia are carried toward the head, agitation, delirium and maniacal excitement may supervene, and in another place he says, "When the blood collects in the breasts of women, madness is signified." Galen attributes mania to suppression or absence of the lacteal secretion. "The hot blood," says he, "accumulates in the breasts, and cannot be converted into milk, and by reason of the intimate connexion between the breasts and brain, hot vapors ascend to the latter, and mania may supervene."

The same notions respecting the causes of the affection are apparent in the writings of Boerhaave, who, in his thirteen hundred and twenty-ninth aphorism, says: "While the serous, milky fluid flows from the contracted vessels of the uterus into the breasts, there arises a slight fever, after which the lochia are often entirely suppressed, whence many symptoms of the worse kind arise, according as the lochial blood is thrown upon the different viscera; hence frensies, pleurisies, peri pneumonies, &c." The prevailing doctrine until the time of Boerhaave appears to have been, that the lochial discharge and lacteal secretion, when from any cause they are retained in the system, are carried to the brain, and, being deposited there, produce all the symptoms of insanity. Levret speaks of the evil, and even fatal, consequences, which may result from the milk being carried to the head in this way, and says that it has often been found after death secreted in the cavities of the brain. The same humoral pathology is apparent in the writings of Van Swieten and Sydenham, and Esquirol speaks of a lacteal diathesis, which modifies all the secretions, and all the morbid reactions which are set up in the systems of puerperal women in consequence of external causes acting on their peculiar susceptibilities. It is, however, more in accordance with the present state of our knowledge to suppose that neither the sup-

pression of the lochial discharge, nor that of the lacteal secretion, is necessarily concerned in the causation of the mental disorder, since in many cases it does not commence until after the lochia naturally cease to be discharged, that is about the sixth or seventh week, and in cases where the disease shows itself earlier, these secretions frequently continue without any interruption. Dr. Marcé considers it probable that when these discharges are arrested about the same time that the mind becomes affected, that their suppression is rather owing to the constitutional disturbance which accompanies the outbreak of the mental disorder than that the latter is owing to their suppression.

A writer in a late number of *Winslow's Psychological Journal* attributes the development of the disease "to reactions between a system predisposed to such derangements, and the normal physiological conditions which are found after confinement; just as in constitutions predisposed to tetanus or nervous delirium these will be developed after the slightest accidents or operations. The pains of labor, the lively emotions which accompany it, and the large suppurating surface which results after the expulsion of the fœtus, will bear a very close comparison with the course and results of a serious surgical operation." As far as the direct results of labor are concerned, Dr. Marcé attributes puerperal insanity to the constitutional disturbance attendant upon the establishment of the lacteal secretion, and to the general shock to the nervous system which is the direct consequence of labor. The peculiar condition in which the uterus is left after labor may also be taken into consideration. "A portion of the liquid contained in its substance," says M. Velpeau, "must return more or less altered into the current of the circulation. More strongly irritated, in a condition bordering on disease, than even during its state of distension, it no longer contracts with the same impunity. Its contraction on portions of the membranes, or of the placenta, or upon clots which may remain in its cavity, often gives rise to morbid changes. Finally, the equilibrium which tends to be established after the disturbance caused by gestation and labor, tends also, at times, to impart fresh shocks to the nervous system." The

causes connected with the physical condition peculiar to puerperal women cannot, however, be considered of themselves sufficient to give rise to insanity, since they are present in all, while but a few are attacked with the disease. It is, therefore, necessary to take into view the predisposing causes, which are the same as those of insanity in general. Among the principal of these is a constitutional tendency to the disease, which may be acquired, but which is probably in far the greater number of cases hereditary. Notwithstanding the difficulty of obtaining information on this point, Dr. Gundry ascertained that 22 out of 56 patients who had been under his care, were either descended from insane ancestors, or had collateral relatives who had been insane. This corresponds with the proportion observed by Esquirol, while Dr. Burrows found in 80 women who became insane after delivery, more than half hereditarily predisposed. Dr. Gooch remarks that "a very large proportion occurred in patients in whose families disordered minds had already appeared."

Influences of every kind which tend to lower the standard of the general health, and produce an anemic state of the system, may act as predisposing causes of the disease. "The cares of maternity," says Dr. Marcé, "demand a strong constitution and considerable vital energy, and quickly exhaust the organism when it does not oppose to them a vigorous resistance." Hence women who have borne several children, who have been exhausted by repeated and prolonged lactations, and who have had to contend with the disadvantages and privations of poverty, are more liable to be attacked after each succeeding labor. The same author controverts the opinion of Reed and Macdonald, that primipare are more liable than those who have borne children to an attack of insanity. "There are many women," says he, "who have borne perfectly well the consequences of a first labor, and yet have become insane after a second or a third, or even later, and been attacked after each subsequent confinement." Among 57 patients he had met with, only 14 were primipare, and among the remaining 43 he had seen 13 who had passed through five, six, or even nine confinements or abortions. The greater liability of women somewhat advanced in years is shown by Dr. Marcé, by com-

paring the number affected at different periods of life with the whole number of women compared at corresponding periods. Thus he shows by carefully prepared statistical tables, that while the number of women who are brought to bed between the ages of 25 and 35 is smaller than during the 10 preceding years, the number becoming insane is more than twice as great as it is during the first of these decennial periods. These facts seem to show conclusively that the liability to puerperal insanity is greater as the woman advances in years, and hence in any case when a patient has once suffered from an attack of the disease, it may be inferred that she will be attacked in her subsequent confinements. The increased liability does not, however, preclude the possibility of preventing subsequent attacks by proper precautionary means, as both Gooch and Ramsbotham state that many women, who had placed themselves under their care in their confinements, entirely escaped an attack, though they had been insane after previous labors.

Moral emotions are considered by Esquirol to be an important cause of puerperal insanity; an opinion which has been opposed by Burrows, and is also controverted by Dr. Marcé. This writer, however, attributes to the emotion of fear, violent sorrow, or even slight crosses, nine cases of puerperal insanity in a total of 66. These causes are well known to produce a considerable proportion of insanity in the non-puerperal state, and their influence upon puerperal women could not be expected to be less than on those in ordinary health. Exposure to cold has also been regarded as an occasional cause of insanity during the puerperal state, to which it may be added, that every kind of neglect of the patient during the trying ordeal to which the female constitution is exposed in passing through the physical sufferings of childbirth, may contribute to the production of insanity, in cases where a predisposition to the disease exists.

The return of menstruation is regarded by Dr. Marcé as exercising an unquestionable influence in the production of the disease. He mentions the case of a lady of great intelligence, related to a physician of Paris, who, six weeks after her confinement, while engaged in her usual occupations, was suddenly seized with an indescribable

feeling of anxiety, her mind wandered, her ideas were confused, and she strove in vain to recognize the objects by which she was surrounded. This mental disorder lasted only a few minutes, and when she came to herself she discovered that her catamenia had returned, for the first time since her confinement. Of 44 women attacked with insanity during the second period, Dr. Marcé found that eleven patients became insane about the sixth week, or about the time when menstruation is generally re-established. Insanity, in the greater number of these cases, commences with the return of the menstrual discharge, or during its continuance ; in others it makes its appearance a few days in advance of the discharge, and appears to be owing rather to the menstrual effort than to the evacuation itself. The practical lesson to be drawn from this tendency ought not to be disregarded, and in every case where there is reason to apprehend a predisposition to insanity, the physician will regard this as one of the most critical periods of the puerperal state, and use every precaution until his patient has passed safely through it.

Mammary abscess has been spoken of as one of the accidents of the puerperal state which may give rise to insanity. Difficult and protracted labors have been supposed to be more likely to be followed by insanity than those of an opposite character. Dr. Marcé, however, asserts that he has only met with four patients in whom the labor presented any considerable difficulty ; in the great majority of the cases the delivery was prompt and easy. Uterine hemorrhage, puerperal convulsions, and the use of chloroform during labor, have been suspected as the occasional causes of insanity, but experience does not seem to have confirmed the suspicions, except in rare instances, which may be considered as altogether exceptional.

The symptoms of puerperal insanity occurring during the second period present no peculiarities which require especial notice. In most cases the lochial discharge and the lacteal secretion take place as is usual when the mental integrity is undisturbed, and the intellectual disorder does not differ from that which is observed in ordinary insanity. This portion of the subject need not, therefore, be dwelt upon, except so far as relates to the diagnosis. The only affection with

which it is likely to be confounded is acute meningitis. In by far the greater number of cases, the extreme agitation, loquacity, incoherence, and other evidences of mental disorder *unattended with fever, or other symptoms which indicate a grave physical lesion*, will show that the attack is one of insanity only. If the case is one of meningitis, in addition to violent delusions there will be from the first high fever, to which will succeed muscular jerkings, and carphalopia, strabismus, convulsive movements of the eyeball, and the head will be thrown back, and coma will finally supervene.

Puerperal insanity may terminate in recovery, in incurability, or in death. The first of these terminations is happily much the most frequent. The cases in which a different result may be apprehended, I think are those which are not so much owing to the puerperal state itself as to some long continued burden of grief, or of care and anxiety, or to some violent and sudden emotional disturbance, under which the mind has given way. These causes not unfrequently give rise to fatal or incurable attacks of insanity independent of the puerperal state, and in connection therewith would not be likely to be followed by less injurious results. In cases which prove fatal after the disease assumes the chronic form, death generally ensues in consequence of affections of the bowels or lungs; but the most frequent cause of death in acute cases is a peculiar form of cerebral excitement, to which French writers have given the name of acute delirium.

The morbid condition to which this title has been applied, frequently occurs as a primary affection. It also supervenes upon cases of ordinary insanity of longer or shorter duration; but, according to Dr. Marcé, puerperal mania "has a special tendency to pass into acute delirium, in consequence of the presence of a large suppurating surface, which, by favoring the development of ataxo-adynamic symptoms, gives to all the diseases accompanying it a character of unusual severity."

When mania is about to terminate in acute delirium, the agitation and excitement daily increase, the tongue becomes dry, the digestive functions are impaired, the pulse increases in frequency, and soon ex-

ceeds 120 pulsations per minute, the face is flushed, the eye has a wild expression, and the skin is covered with a clammy sweat. The patient becomes the prey of constant hallucinations, wastes her strength in violent muscular efforts, and is scarcely conscious of surrounding objects. She passes whole nights almost without sleep, and obstinately refuses all nourishment, but especially liquids. A striking peculiarity of the mental disorder is the prevalence of the emotion of fear or terror. The patient imagines that she has committed some great crime, for which she is to be put to death by the most dreadful tortures, or that she has brought death and destruction upon all who are most dear to her.

If in the course of a few days there is no abatement of the symptoms, the pulse becomes more frequent and weak, the lips and tongue are encrusted with sordes, the breath is offensive, the urine and stools are passed involuntarily, sleeplessness continues, and contributes not a little, with the constant agitation and want of nourishment, to speedily exhaust the patient. With these symptoms the patient may die in the course of four or five days, in a state of profound collapse. "These are cases," says Dr. Marcé, "which English physicians call phrenitis, and which they persist, notwithstanding the absence of decided anatomical changes, in regarding as sub-acute meningitis, terminating fatally in its first stages.

Instead of terminating fatally in a few days, these symptoms may be prolonged for a considerable time; the excitement continues, but alternates with signs of extreme exhaustion, during which the patient retains the dorsal decubitus, and is motionless, and almost without consciousness. The tongue is dry and tremulous, the pupils insensible to light, and the patient rapidly emaciates. The urine and stools continue to be discharged involuntarily, and diarrhea may set in. The pulse becomes imperceptible. The attacks of syncope, which at first were rare, and of short duration, become more frequent and prolonged, and the patient dies, either suddenly in one of the attacks of syncope, or, after a longer time, with all the symptoms of extreme nervous prostration. According to Dr. Marcé, acute delirium does not constitute a distinct affection. It is simply

maniacal excitement carried to its utmost limits, and is dangerous to life in consequence of the extreme perturbation of the nervous action which it induces. In fatal cases, the anatomical lesions are altogether disproportioned to the violence of the symptoms. There is neither thickening of the membranes, nor alteration of the cortical substance, nor secretion of plastic lymph, nor any of the changes which ordinarily denote inflammation.

3. The condition of females during the period of lactation has been aptly denominated a prolonged puerperal state. "As an effect of the daily secretion of the lacteal fluid, woman," says Dr. Marcé, "is sensibly removed from her physiological state; she is more nervous, more impressible, and more accessible to morbid influences, which she would easily have resisted under other circumstances." Women who nurse may be attacked with insanity during the first six or seven weeks after labor, but cases of this description may be considered as more properly belonging to the second period of the puerperal state. The cases which I propose to include under this head are those which generally occur after eight, ten, or more months of lactation, when the system has become exhausted under the long continued drain which has been made upon it by the lacteal secretion. In a small number, however, the attack commences after weaning, and about the time of the return of the menstrual discharge. As a natural consequence of the physical exhaustion induced by lactation, women are sometimes met with in a state of intellectual enfeeblement, and the memory is slightly impaired; there may be some confusion of ideas, they present strange peculiarities of conduct, and sometimes are conscious of their altered health. At the same time, evidences of anemia will be presented; the patient emaciates, the complexion becomes pale, and all the functions languish. The anemic murmur may be heard in the great vessels; there are distressing palpitations; the digestion becomes embarrassed, and is accompanied with eructations; and each act of nursing is followed by a sensation of weakness or emptiness at the epigastrium. The secretion of milk may be diminished, or if it remains the same the patient emaciates all the more rapidly, and febrile attacks of an irregular intermittent form, and

even hectic, may supervene. This condition may pass almost imperceptibly into decided intellectual disorder, or insanity may be established suddenly in consequence of some emotional disturbance, or some error of regimen, such as exposure to cold. Mania and melancholia are the most frequent forms of insanity occurring in consequence of prolonged lactation. They present no peculiarities which distinguish them from the same forms arising under ordinary circumstances. When the cerebral excitement is of a very high grade the general system will suffer to a greater or less extent, and the lacteal secretion may be suspended in the midst of the general disturbance; but in most cases the milk continues to be secreted without interruption. Dr. Macdonald states, that in 40 cases occurring during the period of lactation he has only met with six in which it was suppressed; and Dr. Marcé has never met with a case in which the milk did not continue to be secreted, and require special measures to be employed to prevent its accumulation in the breasts.

A considerable number of cases become insane immediately after weaning. In some of these the patients are of a plethoric habit, and have borne the effects of lactation perfectly well. In such cases, the sudden suppression of an evacuation which has continued for many months, and become, as it were, a habit of the system, induces a state of plethora, which may end in disease. In other cases, where the patients may have been considerably weakened by nursing, yet the system may have become accustomed to the drain, and adapted itself to it. In these cases, if the secretion be suddenly checked without the precautions which are necessary, the functional disorder which may thus be excited will sometimes be sufficient to bring on a state of nervous derangement, which may end in insanity. The effort of the system to restore the menstrual secretion will have the same tendency, and the return of this function after the cessation of lactation, as well as at the termination of the puerperal state in women who do not nurse, may be accompanied with constitutional disturbance, sufficient, in cases where the predisposition exists, to call into life the latent germs of insanity.

The prevention of puerperal insanity will consist in placing the

female under the most favorable hygienic influences which her circumstances will allow. Care should be taken to guard against every source of exhaustion. It ought to be remembered that the discharge from an extensive surface, like that of the interior of the uterus after parturition, cannot fail to reduce the strength of the patient. Her diet, therefore, while it is unstimulating should be nutritious. In her susceptible condition, she should be guarded from all excitement, such as unnecessary visits and conversation, and kept as much as possible out of the reach of anxiety and other painful emotions. Errors of regimen, such as exposure to cold, and indulgence in improper articles of diet, should be avoided. During lactation, if symptoms of anemia should be manifested the infant should at once be weaned, care being taken to avoid the distension of the breasts with the lacteal secretion, and the formation of abscesses. The return of menstruation should be carefully watched, and especial care taken to avoid every exposure until the function is re-established.

In puerperal as in ordinary insanity, so little is positively known of the anatomical lesions which characterize the disease, that in forming a judgment of its nature we are obliged to depend on our knowledge of its causes, and the circumstances under which it most commonly originates, rather than upon the structural changes it produces. The data furnished by morbid anatomy are almost entirely of a negative character; autopsies in the fatal cases having generally failed to show any positive evidence of inflammatory action. It is true that the recent researches of Dr. Calmeil have led him to conclude that acute delirium, which so frequently supervenes in fatal cases of puerperal insanity, is an inflammatory disorder of the cortical cerebral substance; yet he considers it an inflammation which is generally, if not always, met with in exhausted conditions of the system, and can not be treated by active, antiphlogistic measures. In regard to the nature of the affection, Dr. Macdonald remarks: "When insanity occurs during the puerperal state we would expect to find the disease one of irritation rather than of inflammation; for it is admitted by all that the susceptibility of the female is never greater than during this period. She has been exhausted by utero-

gestation, while from the growth of the foetus she has required more nourishment than usual; the irritability of her stomach has perhaps prevented her from using her accustomed quantity of food; she has been debarred from exercise in the open air, that preserver of life and health, and has been worn down by the doubts, and fears, and anxieties that are so apt to hang over the minds of women under these circumstances. In this state we would not look for inflammation; nevertheless we may sometimes meet with it, as we do with pneumonia in typhus, or after severe injuries or surgical operations, where there has been great loss of blood and strength. But it is not that active, vigorous inflammation which occurs in strong individuals. It is an inflammation which, judicious practitioners tell us, is often more successfully treated by stimulants in conjunction with other remedies. When it occurs during lactation we would expect to find a disease of debility, and we do find the mother pale, emaciated, reduced by suckling a large vigorous child, and by nights of watchfulness and anxiety for her offspring."

Various therapeutic measures have been proposed in the treatment of puerperal mania, among which may be mentioned local or general bloodletting, tartar emetic used as a contra-stimulant, warm baths, purgatives, narcotics, etc. I need not enter into any details respecting the operation of these remedies. It will be sufficient to say, in regard to *all* depleting measures, that notwithstanding the appearance of energy and vital activity which may be supposed to be manifested by the quick pulse and great muscular strength, often exhibited by patients in a condition of extreme maniacal excitement, experience has proved, in too many instances, the injurious effects of all remedies of this description. In many cases in which, judging from the high grade of the delirium alone, we might be disposed to believe in the existence of inflammation, and consequently to resort to depletion, pain in the head, increased heat of the scalp, general fever, and other signs of inflammation are absent, and so far from being of service, any active depletion will then invariably render the condition of the patient more unfavorable. If, in an exceptional case, or in one in which the diagnosis is doubtful, the pulse should

be found full and strong, and the condition of the patient appear to require depletion, it should be resorted to with the utmost caution, and its effects should be carefully watched.

In the commencement of an attack of puerperal mania, it will generally be necessary to have the patient placed in a room partially shaded, which shall be kept as quiet as possible, and into which no one shall be allowed to enter except the necessary attendants and nurses. A warm bath, continued for one, two or three hours in the evening, will tend to allay nervous irritation, and promote sleep. The bowels should be regulated by simple laxatives, and as there will generally be found a vitiated condition of the mucous membranes, evidenced by a furred tongue and offensive breath, laxatives should be continued daily with small portions of blue mass, until the tongue shows signs of improvement. Some gentle narcotic, of which a combination of asafetida, hyoscyamus and camphor is a good example, should be given every three or four hours. The diet should be unstimulating but nutritious, and may advantageously consist in great part of new milk, given as freely as the patient can be induced to take it, or as the stomach will bear it. If the acceleration of the pulse, the dry tongue, and the increase of maniacal excitement should indicate the supervention of acute delirium, the same treatment should be continued, but in these cases great difficulty will generally be experienced in controlling the movements of the patient, and in administering the necessary food and medicine. In this state there is a strong tendency to prostration, under the combined influence of the excessive muscular efforts of the patient, her almost total deprivation of sleep, and obstinate refusal of food. It is absolutely necessary, under these circumstances, to restrain the motions of the patient, by confining her with the bed-strap, by which means her strength will be husbanded, and the entire management of the case will be rendered more easy, and at the same time effectual. It is very important in these cases that the physician should have entire control of the bodily movements of the patient, in order that he may be able to apply warmth to the extremities if it should be needed, and also that he may have it in his power to administer food and

drinks in such quantities as are necessary to support the strength of the patient. Unless these cardinal points are attended to, but little good can be expected from the exhibition of medicines. In many cases of acute delirium the patients refuse food with such obstinacy that it is impossible, by any ordinary means, to give it in sufficient quantity. The œsophagus tube, which should be small enough to pass through the nostril, must then be resorted to, and a pint or more of milk, beef-tea, or other liquid nourishment, be injected into the stomach twice daily. If there should be increased heat of the scalp, it may be sometimes removed by warmth to the extremities, or by a dose of laxative medicine, or, if these means fail, by the application of cold to the head. Mustard pediluvia in the evening are always of service, and blisters to the extremities have been found useful as a derivative. It sometimes happens that, with considerable mental anxiety and distress, evidences of cerebral oppression will become apparent; the patient is conscious of every thing about her, but appears to labor under difficulty in collecting her thoughts, and in recalling the occurrences of the day. In attempting to do so her mind becomes confused, and the effort fails of its object. With these symptoms of oppression and tendency to coma, I have found, in the absence of fever, the application of a large blister covering the entire scalp to be followed by a decided improvement in the cerebral disorder, and relief to all the symptoms.

[The substance of the foregoing paper was read, within the few months past, at a meeting of the Philadelphia County Medical Society, and is presented in its present form with the hope that the summary it contains of some of the most recent views in relation to the subject treated, imperfect though it may be, may prove not unacceptable to the readers of the *Journal of Insanity*.]

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Incendiaryism in Mental Affections and Diseases : a Contribution to Legal Medicine, for Jurists and Physicians. By Dr. WILLERS JESSEN. Kiel : E. Homann. 1860.

THE term Pyromania was first introduced by M. Marc, in the *Annales d' Hygiene Publique*, Paris, 1833, and was employed to designate an insane impulse to destroy houses and other property by fire. Esquirol and Georget, in France, had previously glanced at this peculiar manifestation of disease in speaking of "*monomanie instinctive*" (*Discussion Medico-Legale sur la Folie ou Alienation Mentale*, Paris, 1826); but long previous to this, indeed early in the present century, the impulse to burn, incident to certain forms of mental disease, had been pointed out and illustrated by the medical psychologists of Germany. Among the first who alludes to the subject is Ernst Plattner, who wrote as early as 1797. The next writer in Germany who has treated the subject to any extent is Henke, who wrote in 1802, and also published some interesting illustrative cases in the *Kopp Journal* for 1817. Meckel in his "Contributions to Judicial Psychology" for 1820, Vogel in 1824, Masius in 1821, Flemming in Horn's Archives for 1830, Meyn in Henke's *Journal of Legal Medicine* for 1831, have each brought forward illustrations of this symptom of mental disease. The first complete investigation of both the German and French theories of the disease appears to be due to M. Marc, who, as we have seen, first conferred upon it the designation of pyromania. Since M. Marc, Casper, and his follower Richter, in Germany, have given much attention to the subject, contributing many valuable illustrative cases.

In the admirable and learned monograph we have before us, by Dr. Jessen, we are furnished with a complete *résumé* of German scientific investigation of the subject. It is a treatise strongly characteristic of that patient, profound and laborious investigation, which every German psychologist and litterateur brings to bear upon the subject he undertakes to investigate. Dr. Jessen, in the introduction to his treatise, proceeds to take a concise but comprehensive view of the present state of German and French scientific knowledge on the subject, and from this we proceed to translate as extensively as our space will permit.

It would seem that in Germany, as elsewhere, there has been much contention about pyromania. "Indeed," says Dr. Jessen, "the strife has lasted for near half a century, and, though much that is novel has been brought forward, no positive conclusions have as yet been arrived at;" one party denying that the impulse to burn is ever observed as a distinct manifestation of disease, while another party as warmly maintains the contrary opinion; and, though the weight of evidence and scientific knowledge is, in the estimation of Dr. Jessen, greatly in favor of the latter opinion, up to the present time the proof upon which it has rested has been but slight.

The chief difficulty, in the estimation of Dr. Jessen, in arriving at a satisfactory conclusion as to the merits of the contest, lies in defining clearly and precisely the meaning and applicability of the term pyromania. The universal conception under which pyromania falls, is, in every case, that of monomania. Of this form of disease, the French, among whom these ideas originated, make two divisions, *viz.*, *monomanie raisonante*, and *monomanie instinctive*.

The first is a partial mania, in which the patients appear afflicted by one particular morbid idea, conducting themselves, however, so intelligently and reasonably in matters aside from and unconnected with this, that the mental disturbance is not recognized by ordinary persons, and, at times, only with much difficulty by experts.

The existence of this form of disease admits of no doubt. If, therefore, the terms pyromania, and incendiary monomania (*monomanie incendiare*) are received as equally significant, the existence

of pyromania cannot be questioned. On the contrary, so obscure is the conception of instinctive monomania that its existence becomes doubtful. The adjective should indeed signify that, with this form of disease, the action (particularly the criminal action) should take place from a species of instinct, although with this no character of disease is specified; but it only implies that, to us, the action, however small or obscure, is explained by a conscious intent, like every thing which we ascribe to instinct; the one is put in comparison with the other, and the *tertium comparationis* is unfortunately inexplicable. But as we are accustomed to consider those actions which are present in decided mental disease also those which arise from a direct motive, whether the psychical process of their evolution is perceptible or not, as explained, both conditions appear as negative characters of instinctive monomania, inasmuch as neither a direct motive for the action in question, nor an imperceptible disease of the mind exists in it.

A broader definition cannot be deduced from the expression. Many physicians have not desired more, but have suffered the many forms of disease which cannot be explained by normal or abnormal conditions to remain unexplained and doubtful, without attributing them to an instinctive monomania. Thus understood, this hypothetical disease corresponds nearly with the so-called *amentia occulta*, whose distinguishing character is its unsearchableness, and in which the action should be allowed to appear to the judges as unaccountable.

On the other hand, if we seek to find out the positive characteristics of instinctive monomania they vanish immediately, eluding our grasp. The obscure actions, must, however, have some cause, whether it be a hidden normal motive, or psychical disturbance difficult to recognize. Indeed, whenever we search in concrete cases after those causes, not of an instinctive nature, we do not occupy ourselves any longer with those fabulous forms of disease, and only when we are not able to find out distinct causes, (perhaps merely in consequence of our own want of dexterity) then the return to an incomprehensible instinct is open to us.

The scientific inquiry can therefore only be, What psychical disturbances in consequence of the difficulty of the diagnosis can give occasion to the erroneous persistency in holding to the idea of an instinctive monomania ?

Under these circumstances, the three following possibilities come in question :—

1. One can suppose, indeed it frequently is so supposed, that the inexplicable actions might be caused by a primary and direct disease of the will, or of its organ. This acceptation has, however, great difficulties.

We know that every conscious act of the will is the result of a thought (aim), or of a feeling, or, accurately accepted, as a union of both.

We find, accordingly, in all mental diseases morbid thoughts or inclinations, and proceeding from them (as though they were normal) all morbid actions which we are generally able to comprehend. It is usually very difficult, if not impossible, to place before ourselves the act of the will itself as morbid, but to renew so difficult an hypothesis, which besides has totally disappeared from science with the removal of the primary diseases of the will, merely to force an explanation of obscure observations (*beobachtungen*) is totally inadmissible. Besides, this hypothesis appears to have very few supporters ; strictly speaking perhaps none, although it would correspond in a measure with the expression instinctive monomania.

2. The obscure actions can proceed from abnormal thoughts. Many understand by monomania, merely a condition of partial insanity, in which condition only a single fixed idea, or at most only a very narrow circle of morbid ideas, is apparent.

The Psychiatric Society of Paris has, in particular, recognized a case of this kind by *Briere de Boismont*, as one of true and distinct *monomanie*, (*Annales Medico-Psychologiques*). But such cases belong no doubt to *monamanie raisonante*, or partial insanity, and will be better treated of under that head. When we see an action proceeding from an indistinct, fixed, morbid idea, we have no necessity for the hypothesis of instinct. In every discussion as

to the existence of monomania, it is important to remember that, under true monomania, only a variety of partial insanity can be understood. The conception is essentially otherwise if we suppose that the thought which impels to the commission of a criminal action can appear continuously or only transiently in the consciousness as a single abnormal idea, without further foundation.

This appears quite often, as will be seen; but in such cases, so far as present observations extend, the abnormal idea, often certainly the only disturbance of the *intelligence*, is, however, by no means the only disturbance of the *soul*, but rather always direct, and, as a rule, even violent disturbance of the intellect takes place besides, which makes it necessary to enumerate all such forms of disease under the head of melancholy.

3. Finally, the obscure actions which preponderate can proceed from morbid dispositions. This view of incendiary monomania is especially defended in Germany; indeed, it is generally maintained with much justice, coupled, however, with gross errors.

The oldest hypothesis in this direction was, as is well known, a delight in fire (*feuerlust*), or a mania for the sight of fire (*feuerschausucht*), which should be a morbid passion for the sight of fire, and which should not necessarily create an irresistible impulse to incendiarism; but, indeed, like normal passion, ought to give occasion to the kindling of fires allowable by law (viz., bonfires), as also those strictly forbidden.

The delight in fire is not to be sought for exclusively among pyromaniacs; but also among youthful individuals, as disturbances incident to the development of puberty, one might have expected to find it permanent. The observations, however, taken collectively, on which this hypothesis is built, as will be seen farther on, have remained stationary, and it has consequently been abandoned.

In its place the doctrine of an impulse to burn immediately arose (originally in consequence of a *quo pro quo*), which should have driven them on immediately and irresistibly to incendiarism, and, for which reason, it soon became unimportant whether the incendiary had previously been animated by the fear or love of fire.

But this impulse to burn is again an indefinite idea. Every action springs from a more or less active impulse to the same, which, indeed, may be equally minute and fleeting in some cases, but in others very marked, and even in passions and affections it often reaches an extraordinary height. The actions of the insane are brought about in the same way; very strong passions often produce in them the most serious impulses.

The springing up of an impulse to incendiarism is, therefore, not by any means characteristic of mental diseases in general, nor of any distinct form of the same; nor is the action of incendiarism *without* any impulse to it to be thought of. If, therefore, in a given case, it is inferred that the criminal may have found an active impulse to incendiarism, nothing substantial is discovered. The proper question is, rather, whether the impulse may have proceeded from a normal motive, or from a more or less marked mental disturbance. If this question remains unanswered, then the action is left unexplained.

If, therefore, there arises in such cases an impulse to incendiarism pre-eminently (*par excellence*), which never fails, then, confessedly, we have not been able to arrive at the perception of it; for if we could have deduced pyromania from normal or abnormal psychical processes, then would the impulse to incendiarism, as something self-evident, be no more in question.

Hereafter the contention as to the existence of a specific impulse to burn, pyromania, or instinctive monomania, is in all due form disposed of. All these expressions are mere nonsense, words which, in want of distinct ideas, come readily to hand to spare a confession of ignorance. It is therefore quite time to get rid of this terminological rubbish, which has already fallen into disgrace, and thereby clear up the road for scientific investigation.

But when we have to investigate in *each individual* case the origin of the impulse to burn, it follows for science to discover the material, *general* question, What psychical, normal or abnormal, processes can produce an impulse to burn, and the corresponding action? Thus the question is so correctly set before us that it appears clear,

because it can be explained by scientific observations, and only through these. But indeed, this explanation will cost some time and pains, but must necessarily be taken in hand if judicial psychology is to make any real progress in this direction.

The author now proceeds to give a classification of the mental affections and diseases in which the impulse to burn is more particularly manifested, drawing a distinction between what he terms the *affections* (*affecten*, passions,) and the mental *diseases*, (*geisterstörungen*) in which pyromania is observed as a concomitant.

Under the head of mental affections he considers the impulse or disposition to incendiaryism as it is manifested : 1. From revenge ; 2. Fear ; 3. Malcontent, dissatisfaction ; 4. Homesickness ; 5. Mischiefousness, wantonness or petulance.

The classification of the mental diseases in which the disposition is chiefly manifested, set forth by Dr. Jessen, and in the preparation of which he acknowledges the assistance of his learned friend Dr. Flemming, is very full, clear, and precise, and the necessity of a proper classification in order to arrive at a correct understanding of the subject, and to investigate successfully its many intricacies, is pointed out and insisted upon.

This branch of the subject he considers under the following divisions and sub-divisions :—

I. FEEBLEMINDEDNESS.

Continued weakness of the powers of the mind, arising either from defective development from birth, or in the first years of life (*Idiotismus*, *Cretinismus*, etc.), or that which appertains to the development of certain diseases ; such, for example, as imperfect recovery from a pre-induced mental disease (*Imbecillitas*, *Fatuitas*).

1. Folly : weakness of all the mental faculties, gradually passing over into stupidity (defective ideality).

2. Imbecility : want of power to arrange the thoughts consecutively, passing gradually into foolishness (incoherence, or derangement in the development of ideas).

3. Imbecility, with *dementia paralytica* (*paralysie générale*), gross misconception, and irritable imbecility.

II. MENTAL CONFUSION.

1. Deprivation of psychical power of expression, through excess or perversity.

(A) *Mental Disturbance.*

Deprivation of psychical power of expression, with disturbance of the governing or administrative efficiency of the mind.

(a) *Mental Depression.*

Predominant depression, dejection, prevailing melancholy, fear, anxiety or doubt ; its course either continued or remittent, or changing, more or less regularly, into other forms of disease, into exaltation, for example.

1. Sadness (simple melancholia, *lypemanie*, *melancholia tristis*) predominant, without any corresponding external circumstances ; commonly allied with erroneous ideas ; appears in various forms and degrees, as disturbance or unsettling of the will from mental relaxation, with loss of desire and passion ; in the highest degree as—

(a) Torpor (*melancholia attonita*, *stupidité*), apparent mental weakness, deep brooding, an overpowering feeling of disgust or aversion ; mental and physical inertia bordering upon apathy and catalepsy.

2. Precordial disturbance (*precordialunruhe*), melancholia with anguish (*melancholia anxia*). Predominating disquietude and anguish in very diversified grades.

(a) Melancholy with despair (*precordialunruhe mit ver zweiflung*, *melancholia maniaca*, *mania melancholica*).

(b) Melancholia with the prevalence simply of wrong ideas and motives (*precordialunruhe* of Jessen and Flemming ; *mania sine delirio* of Pinel ; *monomanie instinctive* of Marc ; moral insanity of Pritchard).

3. Transitory melancholia ; *dysthymia transitoria s. subita*, according to Flemming's earlier classification ; (*melancholia transitoria*). Dejection or melancholy of different grades, and of proportionate brief duration, in consequence of distinct bodily disturbance (*anomalous menstruation*, *cardialgia*, *epilepsy*, &c).

III. MENTAL EXALTATION.

Pervading exaltation, excitation, predominance of joyfulness, serenity, vexation, or wrath. Course either continuous or remittent, also intermittent (*mania periodica*), or alternating with other diseased conditions more or less regularly; viz., melancholy (*melancholia mixtur* of Heinroth); *folie circulaire*; *folie à double forme*.

1. Excitation, serenity, joyousness, extravagance, inclination to see everything in the most beautiful light (*chæromanie* of Chambeiron), or even a prevailing disposition to chagrin or violence; its course either changing into other forms of disease, becoming remodeled during convalescence, or descending to the following:—

Insanity (*tobsucht*, *manie*, *mania simplex*), joyous or wrathful excitation, excessive activity, rapidity in the evolution of ideas up to intricacy and confusion (*ideenflucht*, *ideenjagd*).

(a) Acute delirium (*delirium acutum*), delirium with all the characteristics of madness, in consequence of known bodily diseases—for example, *meningitis chronica*.

(b) Transitory mania (*mania transitoria s. subita*), mania of short duration, breaking out in consequence of distinctly determined bodily disturbances, after very brief or slightly marked premonitions.

IV. INTELLECTUAL DISTURBANCE.

Deprivation of the psychical power of expression, with prevailing anomaly of the intellectual activity.

1. Partial mania (*monomania* of German writers, *folie monomanie raisonnante*), delirium in one particular direction of the intellectual activity, a fixed idea with or without mental delusions.

2. Complicated mania (*verwirrheit*): delirium in all directions of the mental activity, wherein individual ideas may constantly predominate, often accompanied by mental delusions.

Under the above divisions and subdivisions, the author proceeds, in the body of the work, to bring forward an immense number of collected facts and observations, of great interest in a psychological and medico-legal point of view, and makes an attempt to unravel the "material, general question" before alluded to, viz., "What psychi-

cal, normal or abnormal, processes can produce an impulse to incendiaryism?" With what success we shall endeavor to show in future numbers of the "JOURNAL OF INSANITY."

History of Civilization in England. By HENRY THOMAS BUCKLE.
Vol. II., pp. 576. New York : D. Appleton & Co. 1861.

AFTER long delay, and an unusual amount of impatience on the part of the interested portion of the public, the second volume of Buckle's "History of Civilization" has at length made its appearance. Yet the admirers of the author will be well compensated for their waiting, as the interest of the discussion is more than sustained in this second part. The same fertility of resources and inexhaustible erudition, the same powerful grasp and logical arrangement of his materials, and the same deep earnestness of purpose are disclosed in the second volume as marked the first ; and while there is also equal boldness and originality of view, the style is less diffuse and more compressed, and, even more than its predecessor, the book abounds in passages of striking and impassioned eloquence. The second volume confirms the conviction which was freely expressed upon the issue of the first, that the publication of the work will constitute an epoch in the progress of historic writing. It is perhaps the first great and promising attempt to construct history upon the basis of science.

The idea of treating history in this way will no doubt appear to many as impossible and absurd. Nor is this surprising ; for the current notions of what science really is, and how it stands related to ordinary knowledge and to the human mind, are most vague and erroneous. There is a prevailing idea that science constitutes a body of knowledge by itself, peculiar, independent, not vitally related to common knowledge, and in studying it we are supposed to leave the domain of common thought, and enter a foreign province of new and

rigid methods, which are inapplicable and worthless for all the purposes of a practical life. But this is a mischievous error. Science and the positive knowledge of the uncultured are not radically and essentially different. They cannot, indeed, be separated, and one is but the expanded and perfected form of the other. The same faculties that are involved in the simplest concerns of common life are called into progressively higher and more systematic exercise in the ascending course of science. The commonest actions of daily experience involve the regular play of the mental mechanism—facts are observed, evidence weighed, and inferences drawn—exactly as in the higher regions of acknowledged science. In fact, there is no definition of science that does not make it the living outgrowth of common knowledge. We live in the midst of an orderly and organized scheme of being. The universe is governed by inexorable ordinances; there are no breaks or blanks where law is intermittent. Science is such an exact acquaintance with this order of nature as will enable us to foretell occurrences; such a familiar knowledge of her regularities as will enable us to see beforehand, and predict in what times, places and conditions effects will take place. The test of science is thus *prevision*. And yet this quality is found in ordinary knowledge. The earliest lesson of the child is that one thing follows another in invariable sequence—that water will extinguish fire, that pain will follow burning and night succeed day—while in predicting an eclipse, or in any of its higher flights, science only rises to a larger perception of the same immutable order of events. Science and common knowledge spring from the same root, and only differ in their degree of growth. But while the uncultivated mind sees only the simple, obvious relations of objects and occurrences, science unfolds and extends them. It is not, then, a foreign body lately introduced into the world of thought, but it is the proper product of time and effort, the signal of our advancement, the very flowering and fruiting of the tree of knowledge. In the order of time, the sciences are developed out of their corresponding arts. There is first doubtful, labored, empirical practice, with its blind rules and no rational guidance; then the gradual unfolding of settled, scientific principles.

Science is thus a growth of time and thought, and a measure of the advance of the human mind.

There is deep significance in this fact that science is a growth of ages. It was at first unknown and unsuspected that law reigns in nature. The primeval savage explained all things by imagining each external object animated by a personality like his own; and all actions and effects around him were attributed to caprice of will. But after long experience it began to be noticed that, in certain departments of nature, events take place with a fixed uniformity, and recur in so regular an order that they may be known beforehand, or predicted. This earliest victory of reason was among the stars, and gave rise to the first of sciences, astronomy. Then the motions of earthly bodies were found to be governed by invariable laws, and mechanical science was the result. Still later it was found that the deeper changes which go on within material objects, altering their nature and properties, are also of an invariable character; and then appeared the science of chemistry. And when, furthermore, the same thing was perceived in living beings, there arose the science of physiology.

The advance of science is thus the progressive application of the idea of order and regularity to the various provinces of nature. But upon this great work man enters with reluctance. There is a strange fascination in the unbridled revel of the imagination which accompanies mystical and superstitious views of nature. The mind, accustomed to the wild and unguarded license of fancy, is but slowly subjected to the severe discipline of reason, and enters with hesitation and difficulty into the view of nature as a realm of immutable order. Even though this great fact be recognized in one department of nature, there seems still a disinclination to allow it in others. Those who admitted the control of law over the visible movements of both celestial and terrestrial bodies, still doubted it in the region of life; and many who now acknowledge it there, question it in the department of mind. Others yet who recognize the operation of law in the intellectual world, still deny it in the course of human affairs. Here, say they, all is anomalous, confused, disorderly and capricious.

But this has always been said of unexplored branches of inquiry. Where law has not yet been unfolded, or even where it has been partially established, ignorance, with its usual presumption, affirms that it does not exist. Yet all the results of past inquiry warrant an invincible trust in the supremacy of order. The Creator works in all departments of the universe—as well in the mental as in the material world; as well in the sphere of human activity as in that of physical change—by an all-harmonious and invariable policy of law.

But before any such great conception had dawned upon the human mind, or where it was not entertained, the course of the world's affairs could not become a subject of scientific investigation. History was but a biography of kings and chieftains; a chronicle of public events, and a calendar of public crimes; a narration of the squabbles of politicians, court intrigues and diplomatic manœuvring; an inventory of battles, assassinations and usurpations, and at best a mere delineation of the surface occurrences of human affairs. But in all this we barely pass beyond the province of the romancer. Philosophic history goes deeper. It not only describes human actions, but seeks the influences which impelled them. It labors to discover the causes of events, and those great principles which govern the character and destiny of nations. In the physical world all movement is a question of the predominance and direction of forces; and so also the movements and acts of mankind are the result of the composition of the forces by which they are controlled. The forces which operate in society are numerous and complicated, and hence the difficulty of social problems. Some impel society forward, others obstruct its advancement, and according to their relative intensity, or degree of co-operation, is the resultant effect. The historian should trace for us the operation of the organizing powers by which communities grow. He should deal with the structure, principles, methods and corruptions of governmental systems, but with as little gossip as possible about the politicians. The influence of creeds and ceremonies; of social observances, and of class over class; of popular customs and habits of life; of sexual and parental relations; of

industry, the division of labor, trades, arts, and commerce ; of morals and domestic improvement ; of freedom of thought, the love of inquiry, and superstition ; of surrounding nature, climate, productions and food ; of education, modes of thought, æsthetic culture, and many other active agencies,—these must be profoundly analyzed in their co-workings and counteractions before history can claim to have accomplished its highest purpose. It is not at all wonderful that in the masked and complicated action of those numerous forces, little has hitherto been seen but confusion ; or that to reduce it to order, and trace the chain of cause and effect through the modified and disturbed activities, or even fairly to begin the work, requires the highest order of intellectual ability. One extract from the first volume will be appropriate in this connection :—

" In regard to nature, events apparently the most irregular and capricious have been explained, and have been shown to be in accordance with certain fixed and universal laws. This has been done because men of ability, and, above all, men of patient, untiring thought, have studied natural events with the view of discovering their regularity ; and if human events were subjected to a similar treatment, we have every right to expect similar results. For it is clear that they who affirm that the facts of history are incapable of being generalized, take for granted the very question at issue. Indeed they do more than this. They not only assume what they can not prove, but they assume what in the present state of knowledge is highly improbable. Whoever is at all acquainted with what has been done during the last two centuries, must be aware that every generation demonstrates some events to be regular and predictable, which the preceding generation had declared to be irregular and unpredictable ; so that the marked tendency of advancing civilization is to strengthen our belief in the universality of order, of method, and of law. This being the case, it follows that if any facts, or class of facts have not yet been reduced to order, we, so far from pronouncing them to be irreducible, should rather be guided by our experience of the past, and should admit the probability that what we now call inexplicable will at some future time be explained. This expectation of discovering regularity in the midst of confusion is so familiar to scientific men, that among the most eminent of them it becomes an article of faith ; and if the same expectation is not generally found among historians, it must be ascribed partly to their being of inferior ability to the investigators of nature, and partly to the greater complexity of those social phenomena with which their studies are

concerned. Both these causes have retarded the creation of the science of history.

Those readers who are acquainted with the manner in which in the physical world the operations of the laws of nature are constantly disturbed will expect to find in the moral world disturbances equally active. Such aberrations proceed, in both instances, from minor laws which at particular points meet the larger laws, and thus alter their normal action. Of this, the science of mechanics affords a good example in the instance of that beautiful theory called the parallelogram of forces; according to which the forces are to each other in the same proportion as is the diagonal of their respective parallelograms. This is a law pregnant with great results; it is connected with those important mechanical resources, the composition and resolution of forces; and no one acquainted with the evidence on which it stands ever thought of questioning its truth. But the moment we avail ourselves of it for practical purposes, we find that in its action it is warped by other laws, such as those concerning the friction of the air, and the different density of the bodies on which we operate, arising from their chemical composition, or, as some suppose, from their atomic arrangements. Perturbations being thus let in, the pure and simple action of the mechanical law disappears. Still, and although the results of the law are incessantly disturbed, the law itself remains intact. Just in the same way, the great social law, that the moral actions of men are the product not of their volition, but of their antecedents, is itself liable to disturbances which trouble its operation without affecting its truth. And this is quite sufficient to explain those slight variations which we find from year to year in the total amount of crime produced by the same country. Indeed, looking at the fact that the moral world is far more abundant in materials than the physical world, the only ground for astonishment is that these variations should not be greater; and from the circumstance that the discrepancies are so trifling, we may form some idea of the prodigious energy of those vast social laws which, though constantly interrupted, seem to triumph over every obstacle, and which when examined by the aid of large numbers, scarcely undergo any sensible perturbation.

"Nor is it merely the crimes of men which are marked by this uniformity of sequence. Even the number of marriages annually contracted, is determined, not by the temper and wishes of individuals, but by large general facts over which individuals can exercise no authority. It is now known that marriages bear a fixed and definite relation to the price of grain, and in England the experience of a century has proved that instead of having any connection with personal feelings, they are simply regulated by the average earnings of the great mass of the people: so that this immense social and religious institution is not only swayed, but completely controlled by the

price of food and by the rate of wages. In other cases uniformity has been detected, though the causes of uniformity are unknown. Thus, to give a curious instance, we are now able to prove that the aberrations of memory are marked by this general character of necessary and invariable order. The post-offices of London and Paris have latterly published returns of the number of letters which the writers through forgetfulness omitted to direct; and, making allowance for the difference of circumstances, the returns are year after year copies of each other. Year after year the same proportion of letter-writers forget this simple act, so that for each successive period we can actually foretell the number of persons whose memory will fail them in regard to this trifling, and as it might be accidental occurrence.

"To those who have a steady conception of the regularity of events, and have firmly seized the great truth that the actions of men, being guided by their antecedents, are in reality never inconsistent, but, however capricious they may appear, only form part of one vast scheme of universal order, of which we in the present state of knowledge can barely see the outlines, to those who understand this, which is at once the key and the basis of history, the facts just adduced, so far from being strange, will be precisely what would have been expected, and ought long since to have been known. Indeed, the progress of inquiry is becoming so rapid and so earnest, that I entertain little doubt that before another century has elapsed, the chain of evidence will be complete, and it will be as rare to find an historian who denies the undeviating regularity of the moral world, as it is now to find a philosopher who denies the regularity of the material world."

One great consequence of the belief in the doctrine of universal law is a deeper conviction of the self-sufficingness and self-regulation of human affairs. Mr. Buckle develops this idea in a very able and extended way. He holds that government and literature, instead of being as they are generally supposed, great originating powers of human advancement, are only registers of progress—mere superficial exponents and outgrowths of real forces which work in the depths of society. He takes pains to show the futility of all legislative intermeddling in the way of "protection," either of commerce, literature, or religion. All progress he regards as due to intellectual activity,

and that activity is best secured by the smallest amount of mental trammeling and restriction.

"It is impossible to estimate the character of any period except by tracing its development ; in other words, by measuring the extent of its knowledge. Therefore it is that to write the history of a country without regard to its intellectual progress, is as if an astronomer should compose a planetary system without regard to the sun, by whose light alone the planets can be seen, and by whose attraction they are held in their course, and compelled to run in the path of their appointed orbits. For the great luminary even as it shines in the heavens, is not a more noble or a more powerful object than is the intellect of man in this nether world. It is to the human intellect, and to that alone, that every country owes its knowledge. And what is it but the progress and diffusion of knowledge which has given us our arts, our sciences, our manufactures, our laws, our opinions, our manners, our comforts, our luxuries, our civilization ; in short, every thing that raises us above the savages, who, by their ignorance, are degraded to the level of the brutes with which they herd. Surely, then, the time has now arrived when they who undertake to write the history of a great nation should occupy themselves with those matters by which alone the destiny of men is regulated, and should abandon the petty and insignificant details by which we have too long been wearied."

There has been a foolish outcry against Mr. Buckle as a sceptic, but the criticism has wholly mistaken the nature of his scepticism. He means by it that hardness or reluctance of belief in results already arrived at, which is the first condition of, and strongest incentive to further inquiry. He says :—

" Yet it is evident that until doubt began, progress was impossible. For, as we have clearly seen, the advance of civilization solely depends on the acquisitions made by the human intellect, and on the extent to which those acquisitions are diffused. But men who are perfectly satisfied with their own knowledge will never attempt to increase it. Men who are perfectly convinced of the accuracy of their opinions will never take the pains of examining the basis on which they are built. They look always with wonder, and often with horror on views contrary to those which they inherited from their fathers ; and while they are in this state of mind, it is impossible that they should receive any new truth which interferes with foregone conclusions.

" On this account it is, that although the acquisition of fresh knowledge is the necessary precursor of every step in social progress, such

acquisition must itself be preceded by a love of inquiry, and therefore by a spirit of doubt ; because without doubt there will be no inquiry, and without inquiry there will be no knowledge. For knowledge is not an inert and passive principle which comes to us whether we will or no ; but it must be sought before it can be won ; it is the product of great labor and therefore of great sacrifice. And it is absurd to suppose that men will incur the labor, and make the sacrifice for subjects respecting which they are perfectly content. They who do not feel the darkness will never look for the light. If on any point we have attained to certainty we make no further inquiry on that point, because inquiry would be useless and perhaps dangerous. The doubt must intervene before the investigation can begin. Here then we have the act of doubting as the originator, or, at all events, the necessary antecedent of all progress. Here we have that scepticism, the very name of which is an abomination to the ignorant ; because it distresses their lazy and complacent minds ; because it troubles their cherished superstitions ; because it imposes on them the fatigue of inquiry ; and because it rouses even sluggish understandings to ask if things are as they are commonly supposed, and if all is really true which they from their childhood have been taught to believe.

"The more we examine this great principle of scepticism, the more distinctly shall we see the immense part it has played in the progress of European civilization. To state in general terms, what in this introduction will be fully proved, it may be said, that to scepticism we owe that spirit of inquiry, which during the last two centuries has gradually encroached on every possible subject ; has reformed every department of practical and speculative knowledge ; has weakened the authority of the privileged classes, and thus placed liberty on a surer foundation ; has chastised the despotism of princes ; has restrained the arrogance of nobles, and has even diminished the prejudices of the clergy. In a word, it is this which has remedied the three fundamental errors of the olden time ; errors which made the people, in politics too confident ; in science too credulous ; in religion too intolerant."

The two volumes now published are of the nature of a general introduction to the proper history of English civilization, which is yet to be written. It is an attempt to establish the philosophical principles upon which history should be constructed ; and though another volume should fail to appear, it will stand as an invaluable contribution to this important subject. The second volume is an exhaustive and powerful analysis of the influence of an ecclesiastical or churchly element upon the course of civilization, and is illustrated

by the intellectual career of a Catholic and a Protestant country—Spain and Scotland. The author closes his view of Spanish civilization with the following among other reflections:—

"The reader will now be able to understand the real nature of Spanish civilization. He will see how, under the high-sounding names of loyalty and religion, lurk the deadly evils which these names have always concealed, but which it is the business of the historian to drag to light, and expose. A blind spirit of reverence, taking the form of an unworthy and ignominious submission to the crown and the church, is the capital and essential vice of the Spanish people. It is their sole national vice, and it has sufficed to ruin them. From it all nations have grievously suffered, and many still suffer. But nowhere in Europe has the principle been so long supreme as in Spain. Therefore, nowhere else in Europe are the consequences so manifest and so fatal. The idea of liberty is extinct, if indeed, in the true sense of the word, it can ever be said to have existed.

"We find there a reverence for antiquity and an inordinate tenacity of old opinions, old beliefs, and old habits, which reminds us of those tropical civilizations which formerly flourished. Such prejudices were once universal even in Europe; but they began to die out in the sixteenth century, and are now comparatively extinct except in Spain, where they have always been welcomed. In that country they retain their original force, and produce their natural results. By encouraging the notion that all the truths most important to know are already known, they repress those aspirations, and dull that generous confidence in the future, without which nothing really grand can be achieved. A people who regard the past with too wistful an eye, will never bestir themselves to make the onward progress; they will hardly believe that progress possible. To them antiquity is synonymous with wisdom, and every improvement is a dangerous innovation. In this state Europe lingered for many centuries; in this state Spain still lingers. Hence the Spaniards are remarkable for an inertness, a want of buoyancy, and an absence of hope, which, in our busy and enterprising age, isolate them from the rest of the civilized world. Believing that little can be done, they are in no hurry to do it. Believing that the knowledge they have inherited is far greater than any they can obtain, they wish to preserve their intellectual possessions whole and unimpaired; inasmuch as the least alteration in them might lessen their value. Content with what has been already bequeathed, they are excluded from that great European movement, which, first clearly perceptible in the sixteenth century, has ever since been steadily advancing, unsettling old opinions, destroying old follies, reforming and improving on every side, influ-

encing even such barbarous countries as Russia and Turkey, but leaving Spain unsettled. While the human intellect has been making the most prodigious and unheard-of strides, while discoveries in every quarter are simultaneously pressing upon us, and coming in such rapid and bewildering succession that the strongest sight, dazzled by the glare of their splendor, is unable to contemplate them as a whole; while other discoveries, still more important, and still more remote from ordinary experience, are manifestly approaching, and may be seen looming in the distance, whence they are now obscurely working on the advance thinkers who are nearest to them, filling their minds with those ill-defined, restless and almost uneasy feelings which are the invariable harbingers of future triumph; while the veil is being rudely torn, and nature, violated at all points, is forced to disclose her secrets, and reveal her structure, her economy and her laws, to the indomitable energy of man; while Europe is ringing with the noise of intellectual achievements, with which even despotic governments affect to sympathize, in order that they may divert them from their natural course, and use them as new instruments whereby to oppress yet more the liberties of the people, while, amidst this general din and excitement, the public mind swayed to and fro, is tossed and agitated,—Spain sleeps on, untroubled, unheeding, impassive, receiving no impressions from the rest of the world and making no impressions upon it. There she lies at the further extremity of the continent, a huge torpid mass, the sole representative now remaining of the feelings and knowledge of the Middle Ages. And what is the worst symptom of all, she is satisfied with her own condition. Though she is the most backward country in Europe, she believes herself to be the foremost. She is proud of every thing of which she should be ashamed. She is proud of the antiquity of her opinions; proud of her orthodoxy; proud of the strength of her faith, proud of her immeasurable and childish credulity; proud of her unwillingness to amend either her creed or her customs; proud of her hatred of heretics, and proud of the undying vigilance with which she has baffled their efforts to obtain a full and legal establishment on her soil."

SUMMARY.

DR. THOMAS MAYO ON THE MORAL PHENOMENA OF INSANITY AND ECCENTRICITY.—A state which may seem to deserve the name of Moral Insanity, as exhibiting a perversion of the moral sentiments, tendencies and perceptions, with no slight loss of self-control, must be recognized as often prominent in the early stage of mental disease, and before the intellect is palpably affected. When certain delusions, when delirium or incoherency supervene, the case obtains without question the name of insanity. While most cases begin in this way, a very palpable difference of a practical kind is made by many reasoners in nomenclature; some extending the epithet insane to all those who exhibit these moral phenomena, whether combined with intellectual perversion or not; others refusing to assign it, unless the intellectual lesion be also patent in the case. Up to this point in the history of mental affection the patient must be held, in their opinion, personally responsible for his conduct in a criminal sense; while, with those who are disposed to give moral phenomena an equal weight as pathognomonic of insanity with those of the intellect, the moral phenomena which, with the former, are only recognized as having been insane when an intellectual aberration has occurred, are at once recognized as possessing an independent right to constitute a lunatic.

The grounds on which an intellectual as well as a moral aberration are deemed necessary, where insanity is presumed to confer irresponsibility in regard to crime, appear to me good. I have seen no reason to question the importance of this rule, which certainly tends to maintain the boundaries of vice and madness; so that a murderer should not escape justice on this kind of a plea, unless he had superadded to the phenomena of moral disorder those of intellectual disorder; the assumption which underlies this argument being that, so long as his intellect is unperverted, he will be found to possess a consciousness of the nature of the criminal act in relation to law. This has been argued by the writer of the present essay and by others, and appears to be a prevalent doctrine with the judges. But it does not form my present object to carry it farther. I wish to guard against a certain apparent parity of reasoning which may leave both the patient and the public unprotected, should the moral symptoms of insanity obtain no recognition from the law until intellectual perversion has been recognized.

I have assumed that the patient may not with safety to society be

considered legally irresponsible as mad while the moral stage, or what shall appear to be the moral stage, of the disease is alone perceptible in his motives and actions. But can the law give him no protection until then? He may destroy the comforts of his family and ruin their fortunes and his own; he may have become a bad father, a savage husband, a profligate and licentious member of society, and a total change of character may have occurred with these symptoms; but no false perceptions, no amount of delirium or incoherency may have given evidence that he is mad, on the principles on which I am supposing that state to be made good in the strict meaning of the term,—here is a difficulty which must not be overlooked, in connexion with the above distinctions. In a word, I wish to establish the point, that a different practical criterion must be sought for as to what insanity means, where the case in question is one in which the agent is claiming protection against the consequences of a crime, on the ground that he is irresponsible,—and where he and his family are claiming protection for themselves and surveillance for *him*, on the ground that he is unfit to manage his person and property. We cannot wait to clear up the question whether the definition of insanity, such as it ought to be, has been accomplished in the supposed case, so as to enable us to coerce it by a certificate of unsoundness of mind, before it has reached a Cenci *dénouement*, or such an one as Fuerbach brings forward in his work on jurisprudence, in which the lives of a whole family were saved by their concurring to put to death a homicidal father. The law will not permit the idea of insanity in the agent to plead his excuse when it knows that he is perfectly aware of the murderous tendency of his actions, and being unable to resist them is only in the same predicament with every recognized aspirant to the gallows. On the other hand, while it refuses to him the protection of a madhouse against the consequences of his criminal acts, it will feel—certainly it ought to feel—averse to deny him the preventive protection of a madhouse, when his friends claim it for him, both for his sake and their own, before a guilty outbreak has occurred.

I have observed that the judges of the land are willing to accept the definition of insanity which I claim as appropriate, when the plea is to confer irresponsibility; and they are right; but they will cease to be right, if they do not award the privileges of insanity at a less advanced stage of it when such may be the results of restraint and coercion.

There is no subject in which the inability of language to make good *practical distinctions* is more felt than in this. It expresses the tendencies of the rules to be laid down, rather than the exact occasions for their application. Thus, when irresponsibility in criminal cases has to be conferred on the *actual* delinquent with due protection to the interests of the public, the definition of insanity in the

completest form must be predicated of him; where all that is required of the law amounts to the protection of the *possible* delinquent's person and family, it will appear quite sufficient that a case should be made out of inability to control such conduct as may reasonably be expected to culminate in insanity. It must be admitted that the variety of terms assigned in the medical certificates for the use of witnesses in designating mental lesion facilitates this operation.

Thus both social and individual interests require that the moral phenomena of insanity should be permitted to justify coercion and surveillance when the moral symptoms of insanity alone are present; and such are the considerations by which it appears to me that the doctrine of moral insanity should be estimated by the law. In this point of view, it is the early period of yet imperfect insanity; and thus viewed, it is not one head of a division of which insanity is the genus, as Pinel considers it, but a state almost always recognizable in the early condition of those who eventually become insane—though not always proceeding into that development, or obtaining the genuine characteristics of the formed disease; viz., the intellectual lesion. The question whether a phrase of this moral perversion justifies us in leaving it under the cognate condition called eccentricity, or contains, though dimly perceived, those elements of deficient self-control which we may deem, not indeed exculpatory of criminal acts, but justificatory of our protecting the patient against himself—this question is full of difficulty. To an experienced psychologist there may be strong grounds in a given case, and that in very early life, for suspecting that a false perception underlies what he would willingly call eccentricity. How may such phenomena be distinguished from eccentricity, so that the interference of the law may not become an unjustifiable interference with liberty, or an unnecessary stigma to future life? The amount of self-control possessed by the patient must be taken into the account in reference to the probability that any such morbid perception should gain the mastery over him. It will often be an important indicant that such morbid impressions underlie his eccentricity, if he is noticed to make motiveless but voluntary gesticulations; if talking to himself he is observed to be occasionally talking to some one else, some imaginary personage; apparently motiveless conduct is always suspicious. An unreasonable fancy that he is watched and noticed is the rudiment often of a deep-rooted conviction that there is a conspiracy against him—one of the most frequent maniacal fancies when the intellectual development of the disease has been reached. Meanwhile, the class which I am describing is not less under these singular influences, because they can sometimes play with them or use them with a cunning purpose. It is indeed difficult to find one's way through the intricacies of the *perverted* phenomena acting on the more *normal*. The late Dr. Warburton and I were requested by our friend, the late Dr. Monro,

with his usual solicitude on behalf of his patients, to help him towards solving a doubt which he entertained respecting the *existing* state of one of his patients. The man had labored more than once under unquestionably insane symptoms. But we ascertained that he was well aware of his state, as well as the opinion entertained by the world in regard to such symptoms; and being a profligate and unprincipled fellow, knew how to encourage their evolution, when they were called for, by some infamous gratification or indecent *bizarrie*, as he much preferred an establishment to a prison, which, as a *perfectly sane man*, he would have frequently incurred. He had divested himself of his abnormal symptoms to a remarkable degree when we saw him, and Dr. Munro had been urgently called on to let him out by his unfortunate wife, because on his eventual enlargement, if not then permitted, he would, she said, terribly revenge himself on her.

Doubtless, these symptoms, wavering between eccentricity and insanity, but combined with vicious propensities, are often received into an asylum when a prison would be more appropriate. I was told lately by Mr. Pownall, Chairman, I think, of the Brentford Quarter Sessions, the following anecdote respecting Oxford, who afterwards attempted the Queen's life. Sometime before that act he was brought before Mr. Pownall and another magistrate, on account of some very eccentric cruelty shown towards some fowls; and for this offence let off with a reprimand. Seeing Mr. Pownall sometime afterwards, when in the penal wards of Bedlam—"Had you," said Oxford to that gentleman—"had you punished me when I was brought before you for that former offence, I should not now have been here."

In this point of view, the case of the Hon. Mr. Tuchet was probably a sad instance of mismanagement, both legal and educational. Mr. Tuchet wantonly shot the marker in a shooting gallery. Before this event, while this young gentlemen was on the town in a state of progressively increasing discontent and *ennui*, if the eye of science had been brought to bear upon him, the observer might have possibly seen good reason for calculating upon his exhausting his powers of self-control so far as to acquire good grounds for claiming the protection of the law, before he had rendered his claim to that protection questionable or inappropriate by an act which, at that stage of abnormal conduct, assumed all the frightful character of murder. It is difficult, without more knowledge than we possess of the antecedents of this gentleman, to substantiate completely our hypothesis, but it may be plausibly suggested that he was protected by the decision of a court of justice from punishment for a great crime on the plea of insanity, instead of being prevented from committing that or similar crimes by early surveillance and detention. Meanwhile, the punishment which he thus escaped was *legally deserved*, as he unquestionably well knew the murderous nature of the act which he committed at the moment of commission.

We are liable to the imputation of throwing out an intricate and entangled view of a subject, of which, however, the importance must be admitted. It must be remembered that no chart at present exists to guide us through the contra-indicants which embarrass us in our attempts to reconcile punishment with justice, where some amount of unsoundness of mind is admitted to exist—and coercion with the liberty of the subject, where the power of thought, though weakened, is not abolished. Whatever is the value of the distinctions which I am endeavoring to lay down, it is a painful reflection that the applying them in practice is left to so imperfect a method as the trial by jury. Surely, this is a task which better befits the judges of the land.

If in the above remarks I have maintained the opinion that insanity is incomplete as a ground of protection to delinquents, so long as its symptoms are ethical alone, and not intellectual also, I have not the less considered that it often requires to be made the subject of coercion and surveillance long before any unequivocal evidence of diseased intellect exists. This view opens out a large vista of duties belonging to the psychologist who presides over an asylum, both as to deciding when he may justly consider that its restraints, skilfully managed, will be applicable to a given case, and as to modifying the nature of those restraints and the modes of pleasure, comfort, and encouragement which the patient can bear, so that such patients may be tempted to take refuge in an asylum rather than be taken to it. In this way, and fulfilling these conditions, the proprietor of an establishment may well lay claim to a very high position among the practical philosophers of a country. The habits of mind which he thus forms may not only cure a morbid state, but develop unrecognized mental powers.

Nearly allied with these views, I may mention a very important change which is wanting in the entire education of this country. Certainly, as applied to the higher classes, it assumes as its object the regulation of character contemplated only in its normal state. The *ordinary* vices of the young obtain correction; but of the *extraordinary* and *eccentric* or *abnormal* elements of defective characters, the school or college is kept ostentatiously clear. That is to say, the persons laboring under them are not treated, but expelled; and yet such persons, not deserving to be called mad, form a large element of society. I will illustrate these remarks by a few cases, with the treatment they have appeared to suggest. I was consulted, many years ago, respecting a boy who, as he emerged out of childhood, showed a strong tendency to low company, unreasonable likes and dislikes, to what may be called general recklessness of character, and deficient sympathy with others. At the age of about thirteen he was sent to Rugby, and in a short time expelled from it, not roughly or depreciatingly, but as a case out of their department of education. But what was to happen next? It had clearly become

a ease for the discriminating management of a private tutor. But the private tutor, a clergyman of course, was equally worsted. A respectable farmer was next had recourse to, as likely to gratify the boy's taste for lower company than appertained to his social position, in the most creditable, or least discreditable, way. But this was turned by him to a bad account; and now sottishness and low company were closely besetting him. Consulted by his mother, I told her that the medical profession afforded to its members a larger knowledge of the human mind than the church, the farmhouse, or the public school, and that this knowledge was wanted to him who should pretend to manage her son; and I promised to look out for some young member of our profession, who would undertake to travel with her son. The plan was accepted, and it answered; that is to say, a downward progress was arrested, and the subject of it was raised to a much higher pitch of moral worth and steadiness of character, in which he has since remained. But a gentleman-like tone of mind has never been reached by him.

In another case of the same kind, circumstances permitted me to adopt a much bolder plan. He was a boy, aged about seventeen, who had by that time defeated almost every system of education, and had a fair chance of bringing himself to prison or the gallows, unless certain tendencies to indecency and to violence in his character either became sufficiently marked to render him irresponsible as an undoubted maniac, or could be arrested or placed within his control. This was in the year 1831. A very excellent establishment in my neighborhood, in which I believed he might obtain this wanting education, as well as the positive restraint which some recent outbreaks appeared to justify, on the plea of unsoundness, gave me the means of subjecting this youth to the firm and passionless surveillance which only an asylum, or a place conducted in some measure on the principle of an asylum, can afford. The proprietor of it was well known to me as a gentleman of excellent judgment and an amiable character.

I took him to this establishment, in 1831, accompanied by his father and another relative, showed him at once into his apartment, and briefly told him why he was placed there, and how inflexible he would find his restraint until he should have gained habits of self-control. At the same time I pointed out to him the beautiful and wide grounds of the establishment, and the many enjoyments which he might command by conformableness. This I stated to him in the presence of his two relatives, whom I then at once removed from the room. When I saw him about an hour afterwards, the nearest approach that he made to surprise or regret, was the expression, that "he never was in such a lurch as this before."

For about a fortnight he conducted himself extremely well. He then lost his self-command, kicked his attendant, and struck him

with a bottle of medicine. On this I went over to see him. He vindicated himself with his usual ingenuity, but looked grave and somewhat frightened when I told him that, if he repeated this offence, he would be placed under mechanical restraint; not, indeed, as a punishment, but as a means of supplying his deficiency in self-control. He expresses no kindly or regretful feeling towards his relatives, but confesses the fitness of his treatment and confinement. It appears to me that he is *tranquillized* by his utter inability to resist. From this time, during his stay at the establishment, which I continued for fourteen months, no further outbreak against authority took place. He ceased to be violent, because the indulgence of violence would imply risk of inconvenience to himself, without the comfort which he had formerly derived from it, in exciting the anger of his friends and giving them pain. His attempts at sophistry were thrown away upon us; his complaints of the hardship involved in the nature of the restraints imposed upon him, namely, the limitation to the grounds of an establishment, regular hours, and the constant presence of an attendant, were met by a calm affirmation that he had himself admitted the necessity of some control, and that he had surmounted every other form of it. I encouraged correspondence with myself; but when any one of his letters was insolent and wayward, I declined accepting the next letter until some time should have elapsed. He read much, for we supplied him with books; and I sometimes engaged him in literary conversation. Two or three times I obtained from him a tolerably well-construed Latin lesson. This, however, was to him a school of moral rather than intellectual advancement. A sustained attempt at tuition would have supplied, under present circumstances, too many opportunities of irritation between the teacher and the scholar. The *temper* requisite for the reception of knowledge and the cultivation of the intellect was *being formed*, and could not safely have been *assumed*. The same consideration induced me to postpone to him the motives and sanctions of religion. It gradually became observable, both to myself and the proprietor of the asylum, that he was becoming comparatively happy. He entered freely, and with little acrimony, into conversation with us. His complaints of the injustice of his detention became formal, and assumed the character of lodging a protest rather than making a remonstrance. Sometimes he very ingenuously admitted the freedom from unhappiness which he experienced in his present state, and compared it favorably with that in which he had previously lived, always wretched himself, but occasionally enjoying the miserable comfort of making others yet more wretched. In the course of several of my interviews, I observed the valuable influence exercised upon him by the fear of becoming irregular in mind through the indulgence of intemperate violence. The establishment itself had supplied him with a few cases in point. One young man, who had

struck his father, and from that time was a wretched maniac, drew his attention.

He generally dined alone; occasionally, and by invitation, with Mr. N——'s family. He associated with some of the patients. He never made any attempt to escape from the place; in fact he felt himself mastered, and submitted.

After he had been about a year in this place, he exhibited a trait of character which gave us pleasure. We found that he had given ten shillings to an attendant, by whom we had reason to believe that he had not been respectfully treated.

But the increasing quietness with which he adverted to, and remonstrated against his detention, most tended to assure us that we might soon bring it to a close.

The time indeed was now arriving at which it seemed reasonable to bring to a conclusion a method of treatment, which nothing could have justified in the case to which it was applied, except the extreme importance of the principle which it embodied, and the difficulty of finding any other means of carrying that principle into effect. Towards the end of the fourteenth month of his stay I obtained for my young friend, as a private tutor, a gentleman in whose family he should reside on leaving the establishment with three or four other private pupils; and I determined he should be removed thither by one of those relatives who had conveyed him to the establishment. At the private tutor's my young friend was considered gentleman-like and companionable; if opposed and thwarted, showed no symptoms of his ancient violence; waywardness was discoverable occasionally, but was no longer a property which defied self-control. On leaving his tutor's at the end of about a year, in order to commence professional studies, he dined and slept at my house, and conducted himself in a cordial and agreeable manner.

In order that the successful issue of this case, verified as it has been by my subsequent inquiries, may not place the system under false colors, I may observe that I do not think it could have been carried out in this form but for certain points of character existing in the patient which adapted him to the treatment applied. Without possessing active courage, he had much firmness and power of endurance; and although his scanty moral principle had not given him habits of veracity, yet he possessed in a high degree the tendency to think aloud; he was naturally frank. Indeed, the openness with which he would let out those thoughts, which it was most his interest to keep secret in his evil days, was in constant contrast with the perfect unfairness and disingenuousness of his arguments in support of *them* or in vindication of his conduct. Now, the firmness of his character enabled him to endure what would have shocked weak minds—the name of a madhouse; while his frankness made it impossible for him to conceal his thoughts and feelings, and thus en-

abled both myself and the excellent proprietor of the establishment, perfectly to estimate the effect of our measures on his character while they were proceeding.

"Quis teneat vultus mutantem Protea nodo?"

In the above remarks I have endeavored to accomplish this kind of difficulty; for I have endeavored to discover means of identifying the moral phenomena of the insane state, as distinct from those which may be left to the expressive term eccentricity. And at the same time I have proposed to establish certain practical relations between these states through a modified application of the same principles of treatment to both.—*Winslow's Psychological Journal*, April, 1861.

ON INDIAN HEMP, PARTICULARLY IN RELATION TO ITS PROPERTY OF PRODUCING SLEEP.—Dr. Frommüller first employed the Indian hemp in the case of a phthisical patient in the year 1850, and since that time he has devoted himself to the especial study of the properties of this substance. The result has been the production of a treatise founded upon the clinical observation of a thousand cases in which Indian hemp was administered. This plant has been very much extolled by many practitioners in various countries, but has lately fallen into disuse, owing to the supposed uncertainty of its operation. The discredit attached to it is attributed by Dr. Frommüller partly to the contradictory statements published concerning its operation by various writers, and partly to the difference in its effects in the Eastern hemisphere compared with those observed in Europe. The Indian hemp in India and that grown in Europe present the same external form, but they differ in the relative proportion of narcotic resin which each contains, and which is the active principle of the plant. It appears that the amount of resin depends not only upon differences of latitude, but also upon the depression or elevation of the regions where the plant is grown. Chemical analysis has discovered that the Indian hemp contains gum, bitter extractive matter, albumen, chlorophyll, etherial oil, and a peculiar resin. This resin is called *cannabin* by some writers, and forms six to seven per cent. of the dried plant. The ethereal oil has been obtained by Martius only in small quantity; it is of a slightly yellowish color, of a peculiar ethereal camphor-like smell, and an aromatic astringent, and afterwards bitter taste. The preparations of Indian hemp hitherto employed are the powdered plant for pills or powder, resinous extract of hemp in powders or pills, tincture of the resin, and emulsion.

With regard to its application to the practice of medicine, the Indian hemp may be considered valuable as a tranquilizing antispasmodic drug. It has been employed with favorable results in tetanus

and trismus, cardialgia, rheumatism, and in some mental diseases. Of 1000 cases in which this drug was administered by Dr. Fronmüller, 552 were males and 448 females, and the patients were of various ages, from one year to fifty and more. The principal diseases of the patients were tuberculosis, inflammation, surgical diseases, rheumatism, diseases of the eyes, nervous diseases, and dropsy. The greater part of the cases were treated by the spirituous extract prepared by Merck in Darmstadt : but others were treated by the extract prepared by the late Dr. Jacob Bell, of London. It is to be observed that all the observations were made on cases in which there had been no sleep for several nights, and in which the continuance of sleeplessness was to be anticipated unless some narcotic was employed.

Out of the thousand cases it was found that the narcotic property of the hemp was completely developed in 530, partially in 215, and little or not at all in 255. With the extract of Indian hemp the best effects were produced 145 times with a dose of 12 grains, 64 times with a dose of 8 grains, 63 times with a dose of 10 grains, 35 times with 16 grains, 22 times with 3 grains, 17 times with 2 grains, 15 times with 14 grains, 14 times with 20 grains, 13 times with 6 grains, 12 times with 5 grains. The period of falling to sleep, and the duration of sleep in the cases, are numerically recorded by Dr. Fronmüller, and also the number of cases in which unfavourable results ensued on the day of taking the drug, or on the next morning. Comparative observations were also made with morphia in cases where the Indian hemp had failed. Out of 29 cases in which Indian hemp had produced no effect, sleep was produced by morphia in 24. The dose of morphia was in general rather a strong one—from one-sixth of a grain to 2 grains—in order to induce sleep. In the remaining 5 cases the morphia produced no effect.

The conclusions to which Dr. Fronmuller arrives as the results of his observations are the following : 1. That Indian hemp, among all the known medicines which cause stupefaction, is that which produces a narcotism most completely supplying the want of natural sleep, without occasioning any great excitement of the vascular system, without special stoppage of the secretions, without the superintendence of unfavourable consequences, and without subsequent paralysis. 2. That Indian hemp, on the other hand, is not so strong nor so certain in its operation as opium. 3. That Indian hemp may be given in all acute inflammatory diseases and in typhus fever. 4. That it is worth a trial to alternate the Indian hemp with opium in cases where the latter fails. 5. That the best mode of administration is the alcoholic extract in small pills which contain an addition of the powder of the Indian hemp. The lowest dose for producing sleep may be estimated as eight grains given in pills of one grain each.—*B. and F. Med.-Chir. Rev.*, 1861, from *Vierteljahrsschrift für die praktische Heilkunde*, 1860.

INCREASED ASYLUM ACCOMMODATION FOR THE INSANE IN ENGLAND.—The new asylum for the united counties of Bedfordshire, Herts, and Hants, built for 500 patients, at an estimated cost of £65,000, is nearly complete. At the Chester Asylum additional accommodation has been provided in a manner which appears to have given the commissioners great satisfaction, namely, by two new wings, copied from the new building recently erected at the Devon Asylum. These new wings, with accommodation for 217 patients, have cost only £7,733 5s. 4d., or about £36 a head. Mr. Brushfield, the superintendent of the asylum, has furnished the commissioners with six lithograph plans of these new buildings, which, together with a concise description, the commissioners have published in their appendix. The new male building is quite detached, but the female touches the old asylum by one corner. We sincerely hope to see this plan, so strongly recommended by the commissioners, adopted wherever a moderate degree of asylum extension becomes needful. One of its advantages we take to be, that it will not readily be adapted to any immoderate extension, for instance, such a one as that proposed by the Surrey Magistrates for 660 patients, at a cost of £53,500 ; whereby the Surrey Asylum would be made to contain 1,600 patients, and become in size at least a rival to the gigantic blunders at Hanwell and Colney Hatch. The commissioners have, it appears, at present refused their sanction to this scheme of the Surrey visitors, on the ground that the site is by no means too large for less than half that number of patients ; and as the Magistrates of Surrey have refused to sanction the purchase of more land, it is to be hoped that the scheme will prove abortive, and that the only reasonable mode of providing the needful accommodation, by the erection of a new asylum in another part of the county, will be adopted.

In Dorsetshire, sixty acres of land have been purchased at the rate of £100 per acre, for the site of the new asylum ; plans for the asylum have been approved, and the work, we hear, has been commenced. The new asylum for Northumberland was opened for the reception of patients in March, 1859, and on the inspection of the commissioners, "considering the short time the asylum had been opened, it presented a remarkable amount of comfort and order." It is situated at Cottingwood, three quarters of a mile from Morpeth, and will accommodate 210 patients. There are some points in the description of the building worth noting. "The external walls are built with a two inch void, to prevent the transmission of warmth and damp." "Pressed bricks are used, which give sufficiently smooth surfaces to the walls as to require no plastering to the interior of the wards." "The floors are all boarded." "The window-sashes of the day-rooms and associated dormitories on the ground floor are of cast-iron, made to slide upon brass sheaves, leaving un-

glazed spaces of one pane in breadth when open." "The whole of the wards are warmed by open fires only; the ventilation is effected by two foul air shafts in the towers."

The opening of the Sussex Asylum was delayed in consequence of engineering difficulties met with in boring for water. It was, however, opened on the 25th July, last year, and when visited by the commissioners, its general condition elicited their approbation, and the remark that "it evinced great activity on the part of the medical superintendent."

Plans for the enlargement of the Birmingham Asylum are under consideration, but the sanction of the commissioners has hitherto been withheld, on account of the small amount of land attached to the asylum, which is very near to that thriving town, and therefore the recommendation of the commissioners to purchase fifteen acres of additional land, will probably not be effected without a considerable outlay. The completion of the Bristol Asylum for 400 patients, has been delayed by four strikes among the masons.

The commissioners conclude their report upon the alterations which have taken place in the public institutions for the insane, by describing the separation between the county pauper establishments, and the charitable hospitals for the insane, which have been established and hitherto jointly conducted at Gloucester and Nottingham. At Gloucester, the interest of the subscribers, or, more correctly speaking, the interests of the charity represented by the subscribers of the joint estate for the time being, was purchased for the county for £13,000, with part of which sum the subscribers purchased a gentleman's residence, called Barnwood House. With this old mansion as a basis of operations, the committee have constructed a "building in every way suitable for its purpose, and it will afford excellent accommodation for the upper as well as the middle-class patients."

At Nottingham, a transaction of exactly similar character has taken place. The committee, however, for the hospital, having had to provide an entirely new building, which, with the purchase of fifteen acres of land, has been completed and furnished for £18,500. The building appears to be warmed in a novel manner, by "detached chimney stacks running up in the centre of the rooms, forming blocks of about six feet by five, but pierced in the centre with arched openings; this aperture is filled by two open fire grates placed back to back, the open space between them forming a warm-air chamber, the whole being covered down with an iron slab faced with ornamental tiles." "The patients being, as it were, able to form a double circle round the fire, and to see each other through the arched opening between the fire grates, it renders this arrangement of the places more conducive to the cheerfulness of the apartment; and in regard to heat, it certainly is more economical than if they were placed as they otherwise must be, against the outer wall."

—*Journal of Mental Science, Oct., 1860.*

NUMBER AND DISTRIBUTION OF THE INSANE IN SCOTLAND.—We have again to note a considerable increase in the number of pauper lunatics. On 1st January 1858, they were returned to us as amounting to 4737; on 1st January 1859, to 4980; and on 1st January 1860, to 5226. There was thus an increase of 243 in 1858, and of 246 in 1859.

The distribution of the insane in Scotland on 1st January 1860, was as follows:—

In public and district asylums there were 2632 patients, being an increase, since 1st January 1859, of 136. Of these patients, 1355 were males, and 1277 females; 773 were supported by private funds, and 1859 by parochial rates. At 1st January 1859, the numbers supported by private funds and parochial rates were respectively 809 and 1687. It thus appears, that during 1859 a decrease of 36 had taken place in the number of private patients, and an increase of 172 in that of paupers. The number of patients in private asylums or licensed houses amounted to 852, being an increase of 31 in 1859. Of these patients, 349 were males, and 503 females; 196 were supported by private funds, and 656 by parochial rates. On the first of January 1859, the numbers supported by private funds and parochial rates were respectively 200 and 621. It thus appears, that during 1859 a decrease of 4 had taken place in the number of private patients, and an increase of 35 in that of paupers. The insane in poor-houses amounted to 866, being an increase of 69 during the year. Of these patients, 349 were males, 517 females; all of whom, with the exception of 2 females, were maintained by their parishes. The pauper lunatics placed as single patients amounted to 1847, being a decrease of 30 since the returns of the previous year. These patients, comprising 828 male and 1019 females, were disposed of in the following manner:—682 males and 750 females were living with relatives; 134 males and 220 females were placed with strangers; and 12 males and 49 females were living alone.

As stated in former Reports, we have no reliable means of ascertaining the number of private patients living singly; but in the course of our investigations we became cognizant of the existence of 1887, comprising 1041 males and 846 females. Although we had reason to think that these numbers were considerably within the reality, we adopted them in our Second Report, and we continue them in the estimates of this year, as we are without the means of determining the changes which have occurred from the addition of new cases, or the subtraction of old ones by recovery or death.

Of 8084 insane persons in Scotland, 2858 were supported by private funds, and 5226 by parochial rates. On the 1st of January 1859, the corresponding numbers were 2898 and 4980. The increase in the numbers of the insane thus appears to be restricted to pauper lunatics. It is found, however, in all the different classes of estab-

lishments; in public and district asylums, in private asylums, and in lunatic wards of poorhouses. On the other hand, the number of private patients has diminished. The result is probably in a great measure due to the transfer of a number of the indigent insane from the class of private patients to that of paupers.—*From an Abstract of Third Annual Report of Board of Lunacy for Scotland, in the Edin. Med. Journal, June, 1861.*

INSANITY IN MASSACHUSETTS.—In Massachusetts, there were, in the year 1854, two thousand six hundred and thirty-two insane persons. Unquestionably they are no less, but probably more, at the present time. But allowing that there had been neither increase nor decrease of insanity, within five years, we have 2,632 lunatics at the present time, living in or belonging to this State. There were at the end of the last reported year, [1860], thirteen hundred and sixty-one (1,361) patients in the five public lunatic hospitals, and these were supported in that year, in those institutions, at the cost of \$245,257; adding the estimated cost of the 1,271 lunatics who are at their homes, in poor-houses, prisons, &c., \$100 a year for each, the whole cost of maintaining insanity the last year, was \$372,357. This sum was paid by the State, the towns and the friends of the patients, and came out of the general public and private capital and income of the Commonwealth. This is the expenditure of last year; it was about the same in the year before, and for several or many years previous, and there is no reason to suppose that it will not be the same next year, and in years beyond, unless insanity shall diminish. Eight hundred and seventy-one patients were received into the lunatic hospitals during the last year; seven hundred and fifty-one in the year previous; seven hundred and sixty-seven in the year before that. A few of these came from other states to the M'Lean Asylum; a few were transferred from one hospital to another, and were consequently counted twice, and some others were doubtless old hospital residents, that had been out for a season and returned. Making all these allowances, it is safe to assume, that there were seven hundred new patients admitted in the last year, and these must represent the number of new cases of insanity in the last and in each of several of the years previous; and unless the habits and exposures of our people change, it will be the same this year and next, and in years beyond. Seven hundred of our men and women, in the responsible and self-sustaining age, are taken from the sphere of action and usefulness, and cause so much loss of productive power, to their families and the State, and so much addition to the public and private burden in their support, and the extraordinary care and watchfulness needed for them. This is a matter of terrible interest to the people and the govern-

ment, to see whether it need be perpetually renewed. It is worthy of the profoundest consideration of the legislature to inquire, whether this burden upon the sympathies and the comforts of home, upon private property and the general treasury, this mill-stone hanging on the neck of the body politic may not be lessened, and a better inheritance of a more general health of mind, as well as of body transmitted to our children.—*Memorial of Boston Sanitary Association.*

INCREASE OF INSANITY.—The alleged increase of insanity throughout civilized Europe receives daily fresh illustrations in various quarters. We have stated at different times to what extent the public and private statistics of England and Scotland, of Australia and of France, testify to the growing frequency of mental disease; and we find new proof in the statements of the leading journal, from which it appears that in Ireland, also, the increase in insanity is exciting much attention. In Belfast, last week, a deputation from the governors of the District Insane Asylum waited on the grand jury to present a statement on the subject, and represent the urgent want of more accommodation for the insane. The deputation consisted of the Lord Bishop of the diocese, the Right Reverend Dr. Denvir, the Roman Catholic Bishop, the Rev. Dr. Montgomery, the Rev. Dr. Edgar, and Dr. Stewart, medical superintendent of the asylum. The Lord Bishop said that though they had an asylum which cost £72,000, there was still a want of increased accommodation, and, in his opinion, the difficulty would be met by building an auxiliary asylum on the same ground, and under the same efficient superintendence. The Rev. Dr. Edgar read an interesting statement on the subject, and the right Rev. Dr. Denvir spoke on the "appalling increase" of insanity in that district. In the Belfast Workhouse alone—a place where they cannot be cured or cared for—there are 134 insane persons. There are nine insane persons in the Belfast Jail, and seventeen in the County Down Jail. The Rev. Dr. Montgomery, who said he had been thirty years governor of the asylum, bore similar testimony to the "great increase" of the malady. There are 354 patients in the asylum, and there are nearly the same number ready for admission in the two counties of Down and Antrim. These are either accommodated in work-houses, or confined in jails as criminal insane. But there are numerous cases in which the parties would not be admitted as paupers, and yet their friends are not able to pay for them in private asylums. These are confined in rooms at their respective homes, without proper care, and sometimes subjected to cruel treatment.—*London Lancet.*

DR. DAVID SKAE'S DEFINITION OF INSANITY.—I had arrived at the conclusion that it was a disease of the brain affecting the mind. I have to complete this definition by saying how it affects the mind. My reply is, that emotions and passions are caused by the *disease*, and not by the motives ordinarily calling into action these emotions—that is *moral insanity*—and that in another class of cases ideas are believed in which have no evidence of their truth; they are neither founded on fact, observation, nor memory, and are such as no sane man would entertain as matters of testimony or observation; they are, in fact, morbid fancies and beliefs—ideas caused and believed in by disease.

To reduce my definition to a brief compass, I would say that *insanity is an (apyretic) affection of the brain in which emotions, passions, or desires are excited by DISEASE (not by motives,) or in which conceptions are mistaken for acts of perception or memory.*

This definition appears to me to comprise everything. The first part of it defines *moral insanity*, in which the propensities, emotions, and desires alone are *morbidly* excited; and the second part of it defines *intellectual insanity*, in which there are actual delusions or hallucinations, so long considered the essential feature of madness. If I would add anything to this definition, it would be the *loss of self-control, or self-direction*, which appears to me to be the peculiar characteristic of all forms of insanity,—that loss of self-control over the actions, which permits them to be restless, violent, or extravagant; a loss of control over the passions, which permits them to overrule the judgment and the conscience, and ends in acts of vice, debasement or violence; a loss of control over the succession of the thoughts, which permits them to be incessant, rapid, and incoherent; a loss of control over the ideas, which precludes the insane from the exercise of comparison and judgment, and leaves them (as D. Stewart remarked), like persons in dreams, to mistake the objects of reverie or imagination for realities. In fact, I know of no designation for insanity which more briefly and correctly distinguishes it than the old Scotch one, namely, a man who has *lost his judgment*.—*Edin. Med. Jour.* April, 1861.

POSTPONEMENT OF MEETING OF THE ASSOCIATION.—On account of the troubled state of the country, the Sixteenth Annual Meeting of the Association of Medical Superintendents of American Institutions for the Insane, appointed to convene June 11th, 1861, at Providence, R. I., has been postponed for one year.